YAMAHA

2005 WaveRunner

FX High Output
FX Cruiser High Output

OWNER'S/OPERATOR'S MANUAL

READ THIS MANUAL CAREFULLY BEFORE OPERATION!

U.S.A. Edition

YAMAHA MOTOR CORPORATION, USA

LIT-18626-05-79

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

YAMAHA LIT-CALIF-65-01

EJU09890

To the owner/operator

Thank you for choosing a Yamaha watercraft.

This Owner's/Operator's Manual contains information you will need for proper operation, maintenance, and care. A thorough understanding of these simple instructions will help you to obtain maximum enjoyment from your new Yamaha. If you have any questions about the operation or maintenance of your watercraft, please consult a Yamaha dealer.

Because Yamaha has a policy of continuing product improvement, this product may not be exactly as described in this Owner's/Operator's Manual. Specifications are subject to change without notice.

This manual should be considered a permanent part of this watercraft and should remain with it even if the watercraft is subsequently sold.

EJU12040

Important manual information:

In this manual, information of particular importance is distinguished in the following ways:

The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

⚠WARNING

Failure to follow WARNING instructions could result in severe injury or death to the machine operator, passengers, a bystander, or a person inspecting or repairing the watercraft.

CAUTION:

A CAUTION indicates special precautions that must be taken to avoid damage to the watercraft.

NOTE:

A NOTE provides key information to make procedures easier or clearer.

EJU11730

WaveRunner FX High Output/
FX Cruiser High Output
OWNER'S/OPERATOR'S MANUAL
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P/N LIT-18626-05-79

EJU09920

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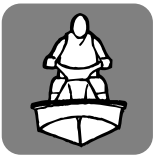

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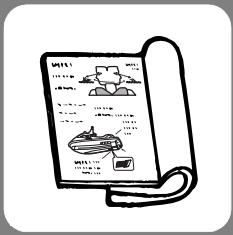

EJU09930

GENERAL AND SAFETY INFORMATION

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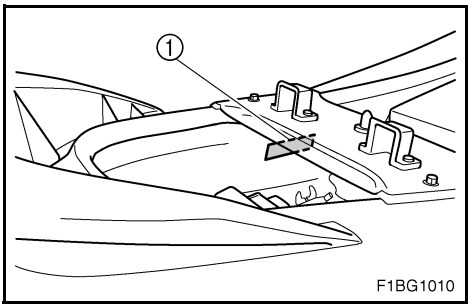
EJU18300

Identification numbers

Record the Primary Identification (PRI-ID) number, Hull Identification Number (HIN) and engine serial number in the spaces provided for assistance when ordering spare parts from a Yamaha dealer. Also record and keep these ID numbers in a separate place in case your watercraft is stolen.



EJU20140

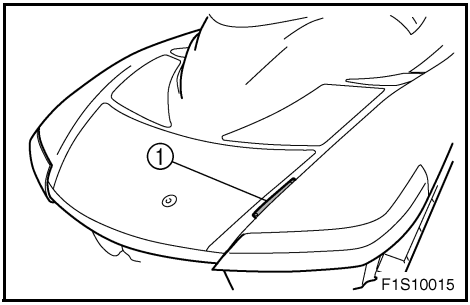
Primary Identification (PRI-ID) number

PRI-I.D
MODEL F1S
YAMAHA MOTOR MANUFACTURING CORPORATION OF AMERICA.
ASSEMBLED IN U.S.A. FROM AMERICAN AND JAPANESE COMPONENTS.
ASSEMBLÉ AUX ÉTATS-UNIS DE PIÈCES AMÉRICAINES ET JAPONAISES.

MODEL: FX1100-D (FX High Output)
FX1100A-D (FX Cruiser High Output)

F 1 S – | | | | | | |

The PRI-ID number is stamped on a label ① attached inside the engine compartment.

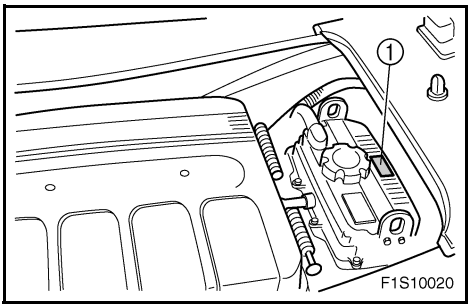


EJU12051

Hull Identification Number (HIN)

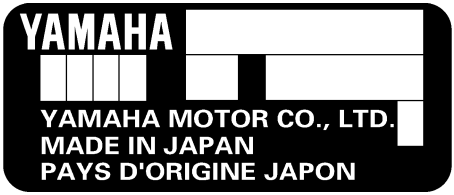
US-YAM□□□□□□□□□□□

The HIN is stamped on a plate ① attached to the aft deck.

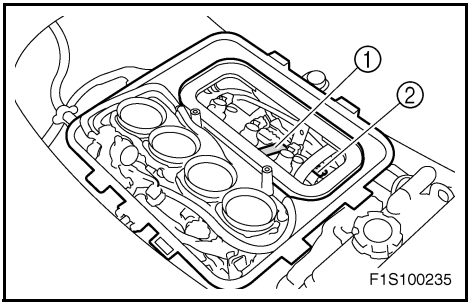


EJU09971

Engine serial number



The engine serial number is stamped on a label ① attached to the engine unit.

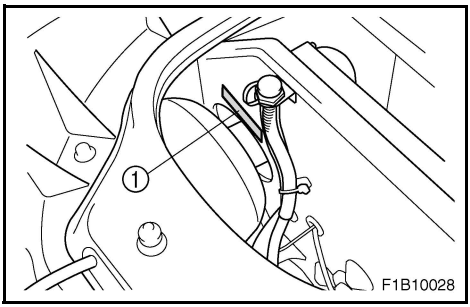


EJU13881

Emission control information

This engine conforms to 2005 U.S. Environmental Protection Agency (EPA) and/or California Air Resouces Board (CARB) regulations for marine SI engines.

This engine is certified to operate on regular unleaded gasoline.



EJU17790

Approval label of Emission control certificate

This label is attached to the top of the cylinder head and to the bulkhead.

① Emission control information label

EMISSION CONTROL INFORMATION		EM
ENGINE FAMILY :		
THIS ENGINE CONFORMS TO [ ] U.S. EPA REGULATIONS FOR MARINE SI ENGINES. THIS ENGINE CONFORMS TO [ ] CALIFORNIA EMISSION REGULATIONS FOR SI MARINE ENGINES. REFER TO THE OWNER'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.		
FELs : [ ] g/kW-hr	ADVERTISED POWER : [ ] kW	
DISPLACEMENT : [ ] cm³	FUEL : UNLEADED REGULAR GASOLINE	
YAMAHA MOTOR CO.,LTD.		[ ]

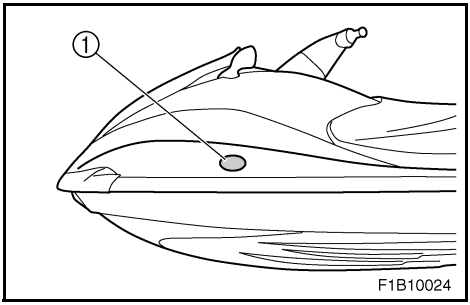
EJU17800

Manufactured date label

This label is attached to the top of the cylinder head.

② Manufactured date label

YAMAHA
Manufactured: □□□□□□



EJU18760

Star labels

This watercraft is labeled with a California Air Resources Board (CARB) star label ①. See below for a description of your particular label.

One Star - Low Emission

The one-star label identifies engines that meet the Air Resources Board's 2001 exhaust emission standards. Engines meeting these standards have 75% lower emissions than conventional carbureted two-stroke engines. These engines are equivalent to the U.S. EPA's 2006 standards for marine engines.

Two Stars - Very Low Emission

The two-star label identifies engines that meet the Air Resources Board's 2004 exhaust emission standards. Engines meeting these standards have 20% lower emissions than One Star-Low-Emission engines.

Three Stars - Ultra Low Emission

The three-star label identifies engines that meet the Air Resources Board's 2008 exhaust emission standards. Engines meeting these standards have 65% lower emissions than One Star-Low-Emission engines.

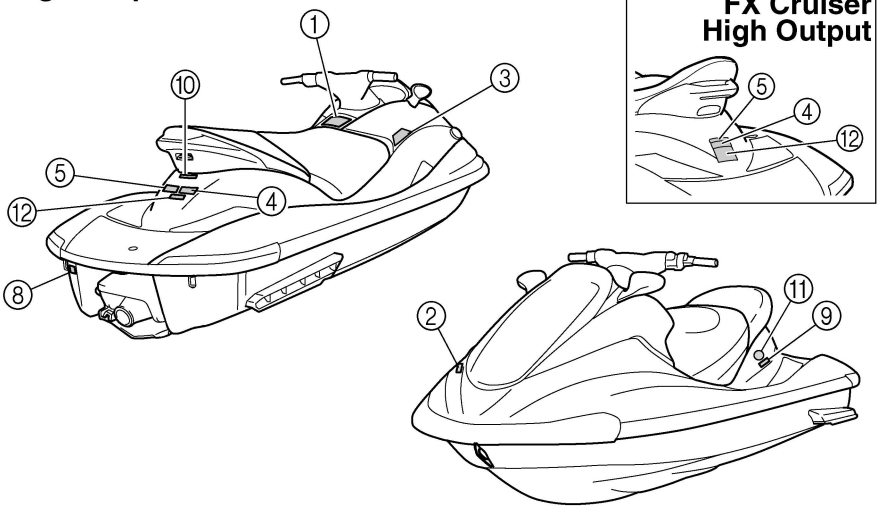
EJU09980

Important labels

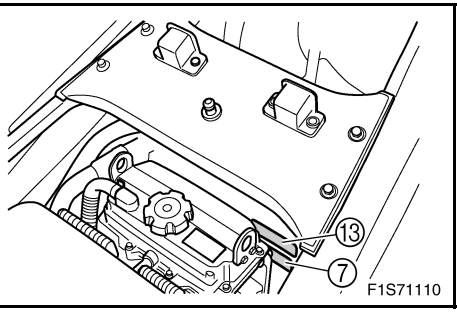
EJU13510

Label location

FX High Output



F1S71100



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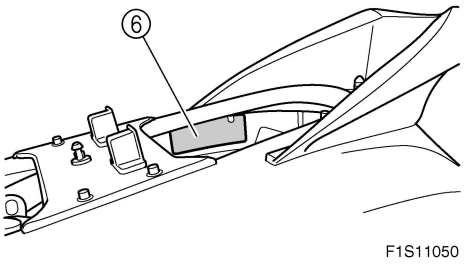
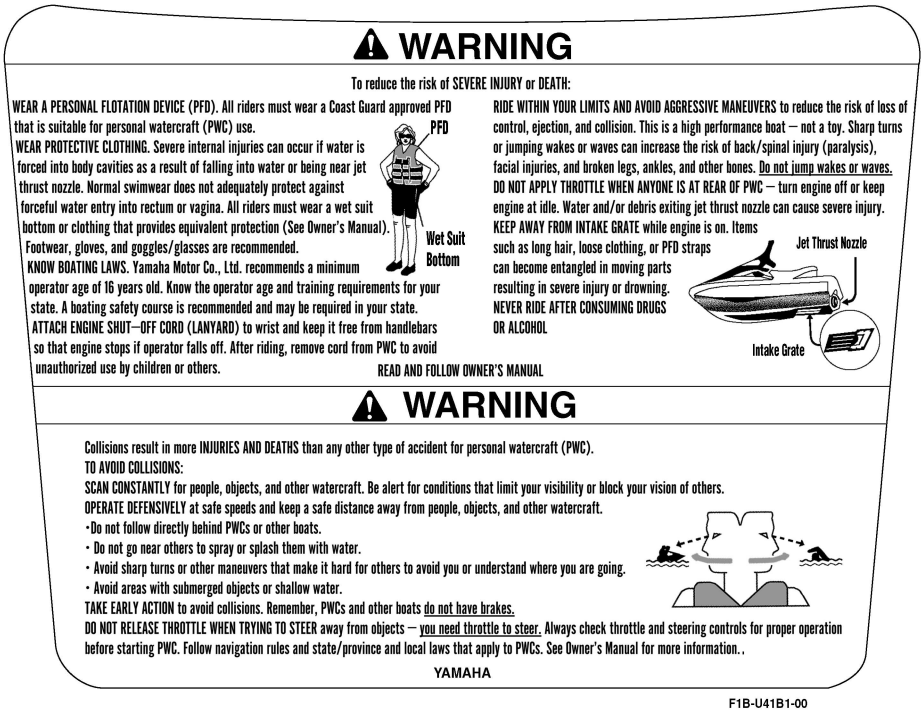


F1S11050

EJU13520

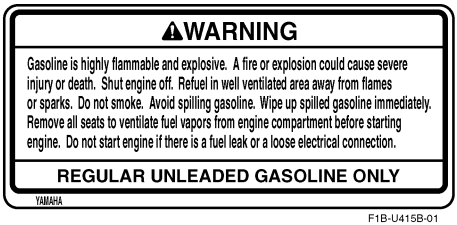
Warning labels

①


WARNING
To reduce the risk of SEVERE INJURY or DEATH:
WEAR A PERSONAL FLOTATION DEVICE (PFD). All riders must wear a Coast Guard approved PFD that is suitable for personal watercraft (PWC) use.
PFD
WEAR PROTECTIVE CLOTHING. Severe internal injuries can occur if water is forced into body cavities as a result of falling into water or being near jet thrust nozzle. Normal swimwear does not adequately protect against forceful water entry into rectum or vagina. All riders must wear a wet suit bottom or clothing that provides equivalent protection (See Owner's Manual). Footwear, gloves, and goggles/glasses are recommended.
Wet Suit Bottom
KNOW BOATING LAWS. Yamaha Motor Co., Ltd. recommends a minimum operator age of 16 years old. Know the operator age and training requirements for your state. A boating safety course is recommended and may be required in your state.
ATTACH ENGINE SHUT–OFF CORD (LANYARD) to wrist and keep it free from handlebars so that engine stops if operator falls off. After riding, remove cord from PWC to avoid unauthorized use by children or others.
RIDE WITHIN YOUR LIMITS AND AVOID AGGRESSIVE MANEUVERS to reduce the risk of loss of control, ejection, and collision. This is a high performance boat — not a toy. Sharp turns or jumping wakes or waves can increase the risk of back/spinal injury (paralysis), facial injuries, and broken legs, ankles, and other bones. Do not jump wakes or waves.
DO NOT APPLY THROTTLE WHEN ANYONE IS AT REAR OF PWC — turn engine off or keep engine at idle. Water and/or debris exiting jet thrust nozzle can cause severe injury.
KEEP AWAY FROM INTAKE GRATE while engine is on. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts resulting in severe injury or drowning.
Jet Thrust Nozzle
Intake Grate
NEVER RIDE AFTER CONSUMING DRUGS OR ALCOHOL
READ AND FOLLOW OWNER'S MANUAL
WARNING
Collisions result in more INJURIES AND DEATHS than any other type of accident for personal watercraft (PWC).
TO AVOID COLLISIONS:
SCAN CONSTANTLY for people, objects, and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.
OPERATE DEFENSIVELY at safe speeds and keep a safe distance away from people, objects, and other watercraft.
• Do not follow directly behind PWCs or other boats.
• Do not go near others to spray or splash them with water.
• Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going.
• Avoid areas with submerged objects or shallow water.
TAKE EARLY ACTION to avoid collisions. Remember, PWCs and other boats do not have brakes.
DO NOT RELEASE THROTTLE WHEN TRYING TO STEER away from objects — you need throttle to steer. Always check throttle and steering controls for proper operation before starting PWC. Follow navigation rules and state/province and local laws that apply to PWCs. See Owner's Manual for more information..
YAMAHA

F1B-U41B1-00

②


WARNING
Gasoline is highly flammable and explosive. A fire or explosion could cause severe injury or death. Shut engine off. Refuel in well ventilated area away from flames or sparks. Do not smoke. Avoid spilling gasoline. Wipe up spilled gasoline immediately. Remove all seats to ventilate fuel vapors from engine compartment before starting engine. Do not start engine if there is a fuel leak or a loose electrical connection.
REGULAR UNLEADED GASOLINE ONLY
YAMAHA

F1B-U415B-01
F1S-U415B-00

③

⚠WARNING

REVERSE SHIFT LEVER OPERATION:

- Shift only while engine is idling or off.
- Reverse is for low speed maneuvering only.
- Do not use reverse function to slow down or stop PWC as it could cause you to lose control, be ejected, or impact handlebars.
- Make sure that there are no obstacles or people behind you before shifting to reverse.

F0V-U41D5-20

④

⚠ WARNING

- Severe internal injuries can occur if water is forced into body cavities as a result of being near jet thrust nozzle.
- Wear a wetsuit bottom or clothing that provides equivalent protection.
- Do not board PWC if operator is applying throttle.

(F1B-U41E1-20)
(F1S-U41E1-00)

⑤

⚠ WARNING

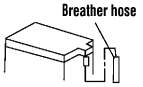
Do not use cleat or grips to lift PWC. PWC could fall, which could result in severe injury.

(F1B-U41E1-20)
(F1S-U41E1-00)

⑥

⚠ WARNING

Be sure to connect breather hose to battery. Fire or explosion could result if not connected properly.



YAMAHA

F0V-U41DB-01

⑦

⚠ WARNING / AVERTISSEMENT / 警告

Do not touch or remove electrical parts when starting or running the engine.

Ne pas toucher ou retirer les pièces électriques lors du démarrage ou de la marche du moteur.

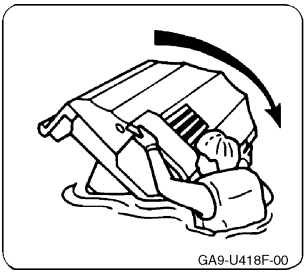
運転中は電装品には触らないでください。

YAMAHA 6B6-83623-00

EJU13540

Other labels

⑧



GA9-U418F-00

⑨

RATED PERSON CAPACITY:3
MAXIMUM LOAD:240 Kg (530 lb)

YAMAHA

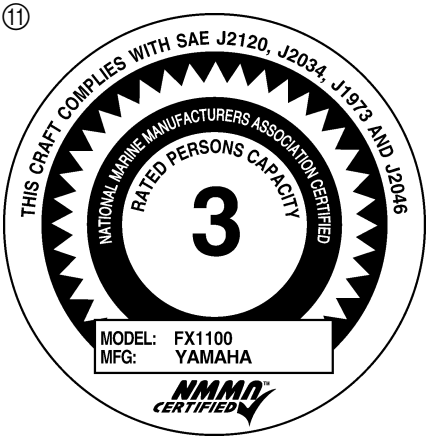
F0P-U41G1-00
F1S-U41G1-00

⑩

FIRE EXTINGUISHER CONTAINER

F1B-U41F5-00
F0V-U41F5-00

⑪



⑫

YAMAHA Motor Corporation, U.S.A.
P.O. Box 6555 Cypress, CA 90630

THIS BOAT IS NOT REQUIRED TO COMPLY WITH THE FOLLOWING U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION:

- Display of Capacity Information
- Safe Loading
- Flotation
- Electrical System (183.425 Conductors)
- Fuel System
- Powered Ventilation

AS AUTHORIZED BY U.S. COAST GUARD GRANT OF EXEMPTION.
(CGB86-039)

(F1B-U41E1-20)
(F1S-U41E1-00)

⑬

All applicable electrical system components installed as original equipment meet appropriate U.S.C.G. requirements for ignition protection.(Ref.33 CFR 183.410 and 183.440)

YAMAHA 60E-83627-00

EJU11770

⚠ Safety information

The safe use and operation of this watercraft is dependent upon the use of proper riding techniques, as well as upon the common sense, good judgment, and expertise of the operator. Every operator should know the following requirements before riding the watercraft.

- Before operating the watercraft, read the Owner's/Operator's Manual, the Riding Practice Guide, the Riding Instruction card and all warning and caution labels on the watercraft. Also, watch the Basic Orientation Video provided with your watercraft. These materials should give you an understanding of the watercraft and its operation.
- Never allow anyone to operate this watercraft until they too have read the Owner's/Operator's Manual, the Riding Practice Guide, the Riding Instruction card and all warning and caution labels, and if possible watched the Basic Orientation Video. Showing them the video may help reinforce the information contained in these materials.

EJU11590

Limitations on who may operate the watercraft

- Yamaha recommends a minimum operator age of 16 years old.
  Adults must supervise use by minors.
  Know the operator age and training requirements for your state. A boating safety course is recommended and may be required in your state. You can find local rules by contacting the United States Coast Guard (USCG), the National Association of State Boating Law Administrators, or your local Power Squadron.

F1FK3002

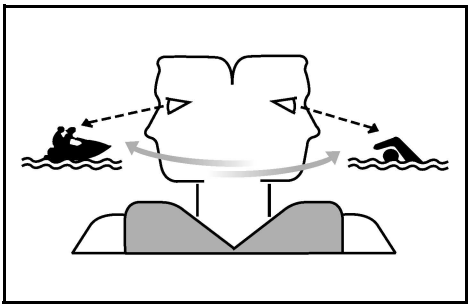
- This watercraft is designed to carry the operator and up to 2 passengers. Never exceed the maximum load limit or allow more than 3 persons (or 2 persons if a water-skier is being pulled) to ride the watercraft at one time.

Maximum load: 240 kg (530 lb)
Load is the total weight of cargo, operator and passengers.

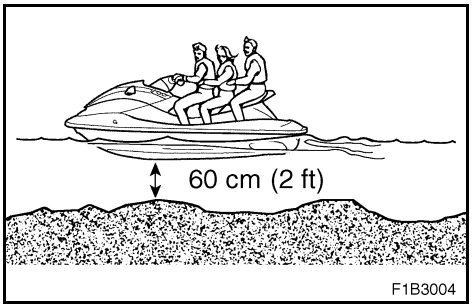
- Do not operate the watercraft with any passengers on board until you have considerable practice and experience riding alone. Operating the watercraft with passengers requires more skill. Take the time to become accustomed to the handling characteristics of the watercraft before trying any difficult maneuvers.

EJU10010

Cruising limitations



- Scan constantly for people, objects, and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.
- Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft.
- Do not follow directly behind watercraft or other boats.
- Do not go near others to spray or splash them with water.
- Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going.
- Avoid areas with submerged objects or shallow water.
- Ride within your limits and avoid aggressive maneuvers to reduce the risk of loss of control, ejection, and collision.
- This is a high performance boat—not a toy. Sharp turns or jumping wakes or waves can increase the risk of back/spinal injury (paralysis), facial injuries, and broken legs, ankles and other bones. Do not jump wakes or waves.
- Do not operate the watercraft in rough water, bad weather or when visibility is poor; this may lead to an accident causing injury or death. Be alert to the possibility of adverse weather. Take note of weather forecasts and the prevailing weather conditions before setting out on your watercraft.
- As with any water sport, you should not ride your watercraft without someone else near by. If you ride further than swimming distance from shore, you should ride by another boat or watercraft, but make sure you stay a safe distance away. It's good common sense!



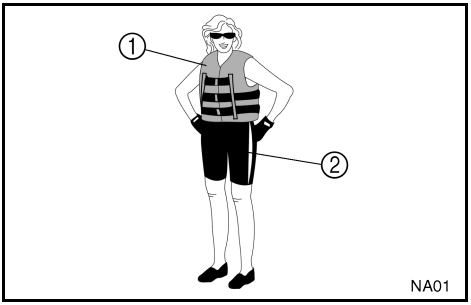
- Never operate in water that is less than 60 cm (2 ft) deep, otherwise you increase your chance of hitting a submerged object, which could result in injury.

- This watercraft is not equipped with lighting required for night operation. Do not operate the watercraft after sunset or before dawn, otherwise you increase the risk of colliding with another boat, which could result in severe injury or death.

EJU11603

Operation requirements

- All riders must wear a Coast Guard approved personal flotation device (PFD) that is suitable for personal watercraft use.
- Wear protective clothing. Severe internal injuries can occur if water is forced into body cavities as a result of falling into water or being near the jet thrust nozzle.
  Normal swimwear does not adequately protect against forceful water entry into rectum or vagina. All riders must wear a wetsuit bottom or clothing that provides equivalent protection. Such clothing includes thick, tightly woven, sturdy and snug-fitting apparel such as denim, but does not include spandex or similar fabrics, like those used in bicycle shorts.



① Coast Guard approved PFD
② Wetsuit bottom

- Eye protection is recommended to keep wind, water, and glare from the sun out of your eyes while you operate your watercraft. Restraining straps for eyewear are made which are designed to float should your eyewear fall in the water.
  Footwear and gloves are recommended.

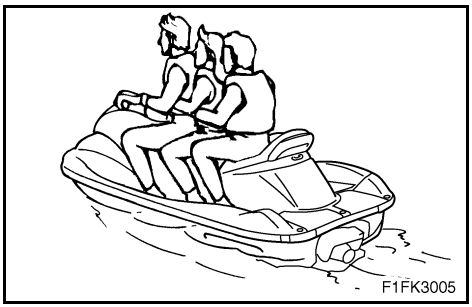
- Helmets meeting Snell or DOT standards are required for IJSBA-sanctioned races. You must decide whether to wear a helmet while you ride for recreation. You should know that a helmet could help protect you in certain kinds of accidents and that it could injure you in others.

  A helmet is designed to provide some head protection. Although helmets cannot protect against all foreseeable impacts, a helmet might reduce your injuries in a collision with a boat or other obstacle.

  A helmet may have potential safety hazards, as well. Falling into the water could risk the chance of the helmet catching water, commonly known as “bucketing,” and the resulting strain on your neck could cause choking, severe and permanent neck injuries, or death. A helmet could also increase the risk of an accident if it reduces your vision or hearing, or if it distracts you or increases your fatigue.

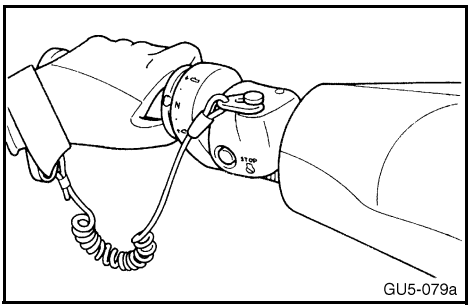
  How should you decide if a helmet’s potential safety benefits outweigh its potential risks for you? Consider your particular riding conditions. Consider factors such as your riding environment and your riding style and ability. Also consider the likelihood of traffic congestion, and the water surface conditions. If you decide to wear a helmet based upon your riding circumstances, choose one carefully. Look for a helmet designed for personal watercraft use, if possible. Consider a helmet meeting Snell or DOT standards. If you will be engaging in closed-course competition, follow the helmet requirements of the sanctioning organization.

- NEVER operate the watercraft after consuming alcohol or taking other drugs.
- For reasons of safety and proper care of the watercraft, always perform the pre-operation checks listed on page 3-4 before operating the watercraft.
- The operator and passengers should always keep both feet in the footwell when the watercraft is in motion. Lifting your feet increases your chances of losing your balance, and your feet being hit by objects outside the watercraft. Do not give a ride to children if their feet cannot reach the floor of the footwell.

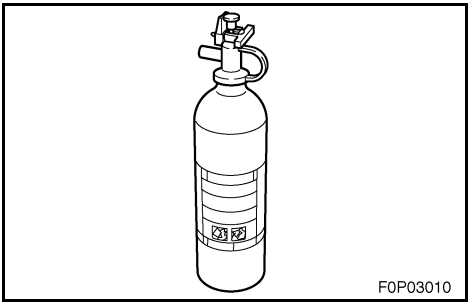


- The passengers should hold on firmly, either to the person in front of them or to the handgrip provided.
- Always consult your doctor on whether it is safe for you to ride this watercraft if you are pregnant or in poor health.

- Do not attempt to modify this watercraft! Modifications to your watercraft may reduce safety and reliability, and render the watercraft unsafe or illegal for use.



- Attach the engine shut-off cord (lanyard) to wrist and keep it free from the handlebars so that the engine stops if the operator falls off. After riding, remove the engine shut-off cord from the watercraft to avoid accidental starting or unauthorized use by children or others.
- Scan carefully for swimmers and stay away from swimming areas. Swimmers are hard to see and you could accidentally hit someone in the water.
- Avoid being hit by another boat! You should always take the responsibility to watch for traffic; other boaters may not be watching for you. If they do not see you, or you maneuver more quickly than other boaters expect, you risk a collision.
- Maintain a safe distance from other boats or watercraft, and also watch for boats' ski ropes or fishing lines. Obey the "Rules of the Road," and be sure to check behind you before making a turn. (See Rules of the Road on pages 1-17 to 1-20.)



- This watercraft is included in the Class A inboard boat classification of the U.S. Coast Guard. A watercraft of this type MUST carry a fire extinguisher of a B-1 classification, with a capacity of two pounds or more when navigating in waters under Coast Guard jurisdiction. In addition, most state and local boating laws also require that the fire extinguisher be approved by the USCG.

EJU13810

Recommended equipment

The following items should be carried on board your watercraft:

- Sound-signaling device
  You should carry a whistle or other sound-signaling device that can be used to signal other boats. See Rules of the Road for more information.
- Visual distress signals
  It is recommended that a USCG approved pyrotechnic device be stored in a waterproof container on your watercraft. A mirror can also be used as an emergency signal. Contact your Yamaha dealer or the Coast Guard for more information.
- Watch
  A watch is helpful so you will know how long you have been operating.
- Towline
  A towline can be used to tow a disabled watercraft in an emergency.

EJU17810

Hazard information

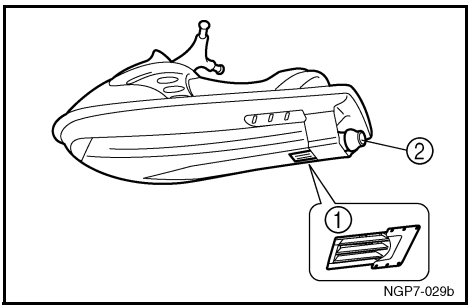
- Never start the engine or let it run for any length of time in an enclosed area. Exhaust fumes contain carbon monoxide, a colorless, odorless gas that may cause loss of consciousness and death within a short time. Always operate the watercraft in an open area.
- Hot oil tank, muffler, and engine surfaces can cause serious burns. Do not touch the oil tank, muffler, or engine immediately after turning the engine off.

EJU19970

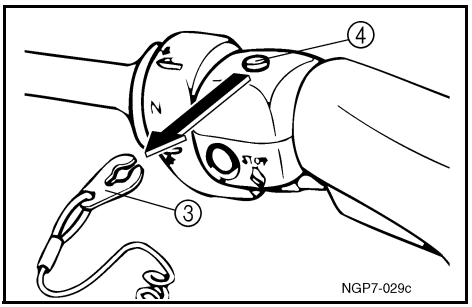
Watercraft characteristics

- Jet thrust turns the watercraft. Releasing the throttle lever completely produces only minimum thrust. If you are traveling at speeds above trolling, you will have rapidly decreasing ability to steer without throttle. This model has the Yamaha Engine Management System (YEMS) that includes an Off-Throttle Steering (OTS) system. It will activate at planing speeds should you attempt to steer the watercraft after releasing the throttle lever. The OTS system assists in turning by continuing to supply some thrust while the watercraft is decelerating, but you can turn more sharply if you apply throttle while turning the handlebars. The OTS system does not function below planing speeds or when the engine is off. Once the engine slows down, the watercraft will no longer turn in response to handlebar input until you apply throttle again or you reach trolling speed. Practice turning in an open area without obstructions until you have a good feel for this maneuver.
- This watercraft is water-jet propelled. The jet pump is directly connected to the engine. This means that jet thrust will produce some movement whenever the engine is running. There is no “neutral” position. You are in either “forward” or “reverse,” depending upon the shift lever position.
- Do not use the reverse function to slow down or stop the watercraft as it could cause you to lose control, be ejected, or impact the handlebars. You could also damage the shift mechanism.
  This could increase the risk of back/spinal injury (paralysis), facial injuries, and broken legs, ankles, and other bones.

- Reverse can be used to slow down or stop during low-speed maneuvering, such as when docking. Once the engine is idling, shift to reverse and gradually increase engine speed. Make sure that there are no obstacles or people behind you before shifting into reverse.
- Keep away from the intake grate ① while the engine is on. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts resulting in severe injury or drowning.
- Never insert any object into the jet thrust nozzle ② while the engine is running. Severe injury or death could result from coming in contact with the rotating parts of the jet pump.



- Stop the engine and remove the clip ③ from the engine shut-off switch ④ before removing any debris or weeds, which may have collected around the jet intake.

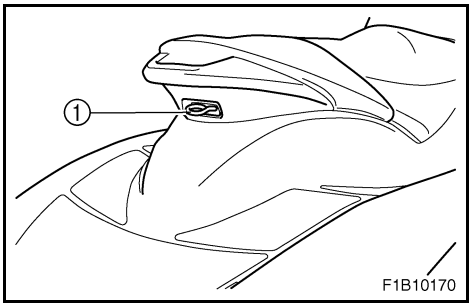


EJU17820

Water-skiing

You can use the watercraft for water-skiing if it has the seating capacity to carry the operator, a rearward-facing spotter, and the water-skier when he or she is not skiing.

The watercraft must also have a cleat ① designed to pull a ski towrope; do not attach the towrope to any other location.



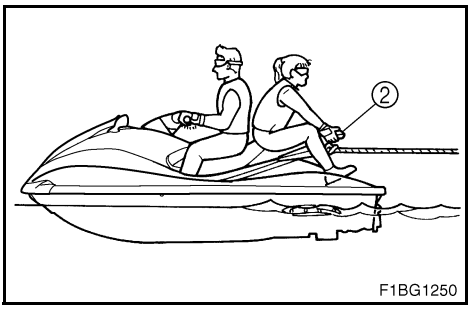
It is the watercraft operator's responsibility to be alert to the safety of the water-skier and others. Know and follow all state and local water-skiing regulations in effect for the waters in which you will be operating.

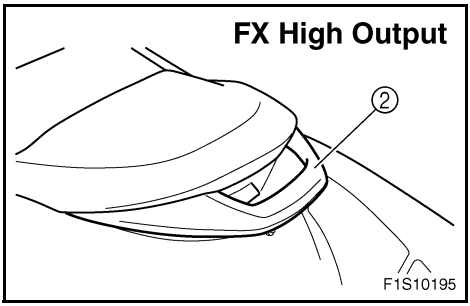
The operator should be comfortable carrying passengers before attempting to pull a skier.

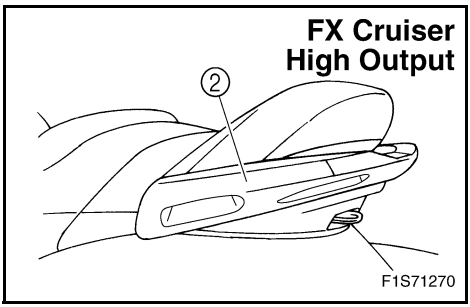
The following are some important considerations for minimizing risks while water-skiing.

- The skier should wear an approved PFD, preferably a brightly colored one so boat operators can see the skier.
- The skier should wear protective clothing. Severe internal injuries can occur if water is forced into body cavities as a result of falling into the water. Normal swimwear does not adequately protect against forceful water entry into rectum or vagina. The skier should wear a wetsuit bottom or clothing that provides equivalent protection.

- A second person should be on board as a spotter to watch the skier; in most states it is required by law. Let the skier direct the operator's control of speed and direction with hand signals.
  The spotter should sit securely on the passenger seat and hold onto the hand-grip ② with feet firmly on the floor of the footwell for proper balance while facing to the rear to watch the skier's hand signals and his or her condition.







- Your control while pulling a skier is affected by the skier's ability, as well as water and weather conditions.
- When preparing to pull a skier, operate the watercraft at the slowest possible speed until the watercraft is well away from the skier and slack in the towrope is taken up. Make sure that the rope is not looped around anything.
  After checking that the skier is ready and that there is no traffic or other obstacles, apply enough throttle to raise the skier.
- Make smooth, wide turns. The watercraft is capable of very sharp turns, which could exceed the abilities of the skier. Keep the skier at least 50 m (150 ft), about twice the distance of a standard towrope, from any potential hazard.
- Be alert to the hazard of the towrope handle snapping back at the watercraft when the skier falls or is unable to get up on the skis.
- Towing heavy or bulky objects other than skiers, such as another boat or watercraft, can cause loss of steering control and create a hazardous condition. If you must tow another boat in an emergency situation, operate slowly and cautiously.

EJU11800

Rules of the Road

Yamaha watercraft is legally considered a powerboat. Operation of the watercraft must be in accordance with the rules and regulations governing the waterway on which it is used.

Just as there are rules that apply when you are driving on streets and highways, there are waterway rules that apply when you are operating your watercraft. These rules are used internationally, and are also enforced by the United States Coast Guard and local agencies. You should be aware of these rules, and follow them whenever you encounter another vessel on the water.

Several sets of rules prevail according to geographic location, but are all basically the same as the International Rules of the Road. The rules presented here in this Owner's/Operator's Manual are condensed, and have been provided for your convenience only. Consult your local U.S. Coast Guard Auxiliary or Department of Motor Vehicles for a complete set of rules governing the waters in which you will be operating your watercraft.

Steering and sailing rules

Whenever two vessels on the water meet one another, one vessel has the right-of-way; it is called the "stand-on" vessel. The vessel that does not have the right-of-way is called the "give-way" or "burdened" vessel. These rules determine which vessel has the right-of-way, and what each vessel should do.

Stand-on vessel

The vessel with the right-of-way has the duty to continue its course and speed, except to avoid an immediate collision. When you maintain your direction and speed, the other vessel will be able to determine how best to avoid you.

Give-way vessel

The vessel which does not have the right-of-way has the duty to take positive and timely action to stay out of the way of the stand-on vessel. Normally, you should not cross in front of the vessel with the right-of-way. You should slow down or change directions briefly and pass behind the other vessel. You should always move in such a way that the operator of the other vessel can see what you are doing.

The General Prudential Rule regarding the right-of-way is that if a collision appears unavoidable, neither boat has the right-of-way. Both boats must avoid the collision.

In other words, follow the standard rules except when a collision will occur unless both vessels try to avoid each other. If that is the case, both vessels become give-way vessels.

Rules when encountering vessels

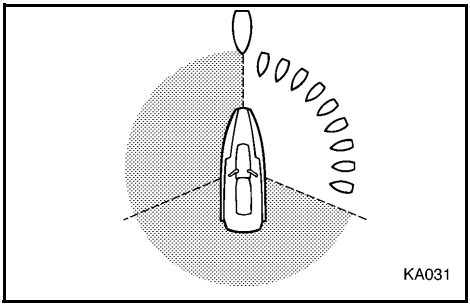
There are three main situations that you may encounter with other vessels which could lead to a collision unless the Steering Rules are followed:

Meeting: you are approaching another vessel head-on

Crossing: you are traveling across another vessel's path

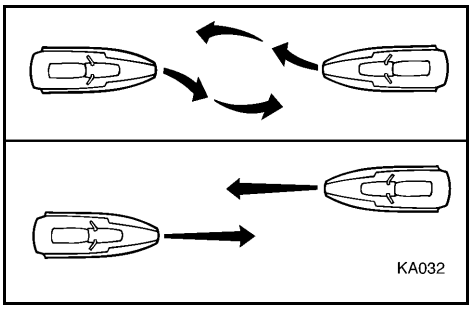
Overtaking: you are passing or being passed by another vessel

In the following illustration, your watercraft is in the center. You should give the right-of-way to any vessels shown in the white area (you are the give-way vessel). Any vessels in the shaded area must yield to you (they are the give-way vessels). Both you and the meeting vessel must alter course to avoid each other.



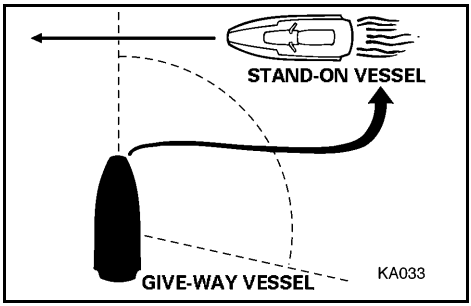
Meeting

If you are meeting another power vessel head on, and are close enough to run the risk of collision, neither of you has the right-of-way! Both of you should alter course to avoid an accident. You should keep the other vessel on your port (left) side. This rule does not apply if both of you will clear one another if you continue on your set course and speed.



Crossing

When two power-driven vessels are crossing each other's path close enough to run the risk of collision, the vessel which has the other on the starboard (right) side must keep out of the way of the other. If the other vessel is on your starboard (right) side, you must keep out of its way; you are the give-way vessel. If the other vessel is on your port (left) side, remember that you should maintain course and direction, provided the other vessel gives you the right-of-way as it should.



Overtaking

If you are passing another vessel, you are the give-way vessel. This means that the other vessel is expected to maintain its course and speed. You must stay out of its way until you are clear of it. Likewise, if another vessel is passing you, you should maintain your speed and direction so that the other vessel can steer itself around you.

Other special situations

There are three other rules you should be aware of when riding your watercraft around other vessels.

Narrow channels and bends

When navigating in narrow channels, you should keep to the right when it is safe and practical to do so. If the operator of a power-driven vessel is preparing to go around a bend that may obstruct the view of other water vessels, the operator should sound a prolonged blast of four to six seconds on the whistle. If another vessel is around the bend, it too should sound the whistle. Even if no reply is heard, however, the vessel should still proceed around the bend with caution. If you navigate such waters with your watercraft, you will need to carry a portable air horn, available from local marine supply stores.

Fishing vessel right-of-way

All vessels fishing with nets, lines or trawls are considered to be “fishing vessels” under the International Rules. Vessels with trolling lines are not considered fishing vessels. Fishing vessels have the right-of-way regardless of position. Fishing vessels cannot, however, impede the passage of other vessels in narrow channels.

Sailing vessel right-of-way

Sailing vessels should normally be given the right-of-way. The exceptions to this are:

1. When the sailing vessel is overtaking the power-driven vessel, the power-driven vessel has the right-of-way.
2. Sailing vessels should keep clear of any fishing vessel.
3. In a narrow channel, a sailing vessel should not hamper the safe passage of a power-driven vessel that can navigate only in such a channel.

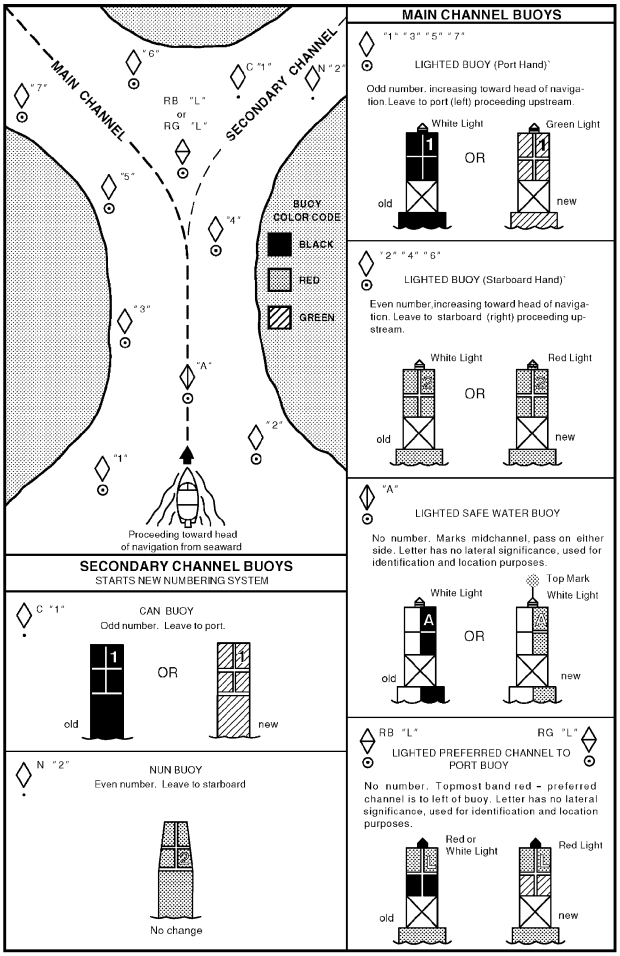
Reading buoys and other markers

The waters of the United States are marked for safe navigation by the lateral system of buoyage. Simply put, buoys and markers have an arrangement of shapes, colors, numbers and lights to show which side of the buoy a boater should pass on when navigating in a particular direction. The markings on these buoys are oriented from the perspective of being entered from seaward (the boater is going towards the harbor). Red buoys are passed on your starboard (right) side when proceeding from open water into the harbor, and black buoys are to your port (left) side. An easy way to remember the meaning of the colors is the phrase “red right returning.” When navigating out of the harbor, your position with respect to the buoys should be reversed; red buoys should be to port and black buoys to starboard.

Many bodies of water used by boaters are entirely within the boundaries of a particular state. The Uniform State Waterway Marking System has been devised for these waters.

This system uses buoys and signs with distinctive shapes and colors to show regulatory or advisory information. These markers are white with black letters and orange borders. They signify speed zones, restricted areas, danger areas, and general information.

Remember, markings may vary by geographic location. Always consult local boating authorities before riding your watercraft in unfamiliar waters.



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EJU11810

To get more boating safety information

Be informed about boating safety. Additional publications and information can be obtained from many organizations, including the following.

United States Coast Guard

Consumer Affairs Staff (G-BC)
Office of Boating, Public, and Consumer Affairs
U.S. Coast Guard Headquarters
Washington, D.C. 20593-0001
Boating Safety Hotline: 1-800-368-5647

Other sources

You can find local rules by contacting the National Association of State Boating Law Administrators, or your local Power Squadron.

Watercraft Education and Training

The Online Boating Safety Course, available through the watercraft section of the yamaha-motor.com website, is a free, 50 question learning course available to the public. Upon successful completion of 80 percent or better, the user can request a certificate of completion by mail or can download one immediately. The Online Boating Safety Course, provided by the Boat/US Foundation, is approved by the National Association of State Boating Law Administrators (NASBLA) and recognized by the United States Coast Guard. This course meets the education requirement for those states that recognize non-proctored, NASBLA-approved courses.

Yamaha is the watercraft industry's leading manufacturer to build awareness and support for boating education. In 1997, Yamaha launched its GET W.E.T. (Watercraft Education and Training) initiative and has since reached out to over one million Americans promoting the benefits of boating education.

The Online Boating Safety Course:
http://www.boatus.com/onlinecourse/

EJU10060

Enjoy your watercraft responsibly

You share the areas you enjoy when riding your watercraft with others and with nature. So your enjoyment includes a responsibility to treat these other people, and the lands, waters, and wildlife with respect and courtesy.

Whenever and wherever you ride, think of yourself as the guest of those around you. Remember, for example, that the sound of your watercraft may be music to you, but it could be just noise to others. And the exciting splash of your wake can make waves others won't enjoy. Avoid riding close to shoreline homes and waterfowl nesting areas or other wildlife areas, and keep a respectful distance from fishermen, other boats, swimmers, and populated beaches. When travel in areas like these is unavoidable, ride slowly and obey all laws.

Remember that pollution can be harmful to the environment. Do not refuel or add oil where a spill could cause damage to nature. Remove your watercraft from the water and move it away from the shoreline before refueling. And keep your surroundings pleasant for the people and wildlife that share the waterways: don't litter!

When you ride responsibly, with respect and courtesy for others, you help ensure that our waterways stay open for the enjoyment of a variety of recreational opportunities.

E

EJU10070

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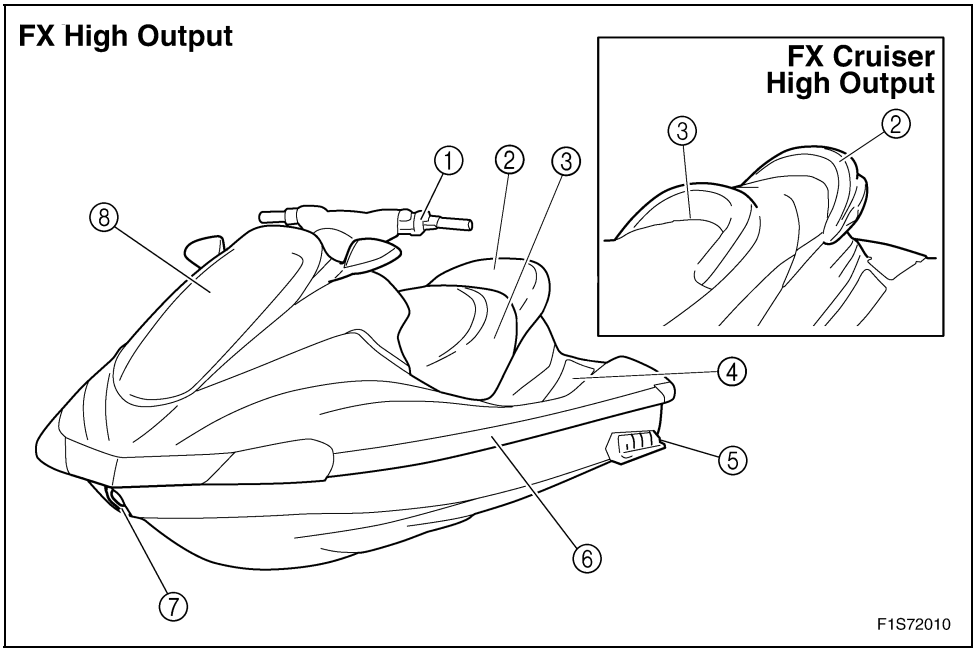
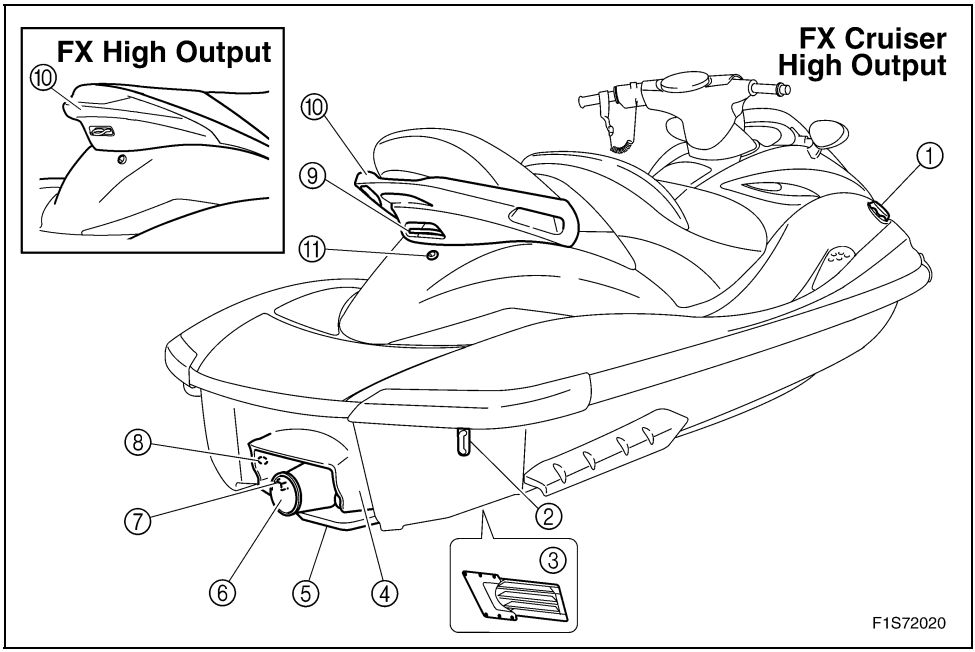
2

EJU10080

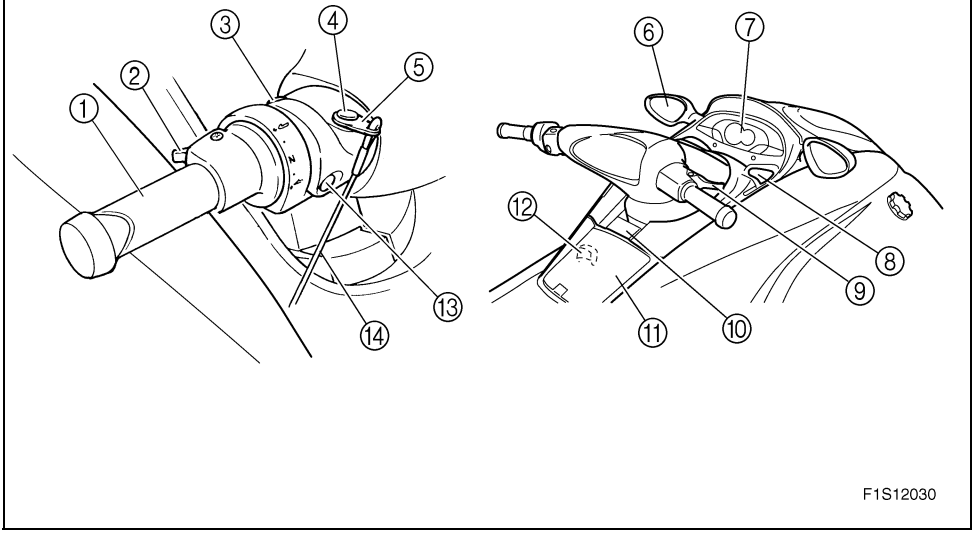
Location of main components



① **Handlebars**
Use to control direction.
② **Rear seat**
③ **Front seat**
④ **Footwell**
Use to place feet for balance.
To keep proper balance while facing to the rear to watch the skier.
⑤ **Sponsons**
⑥ **Gunwale**
⑦ **Bow eye**
Use to attach rope for transporting, mooring or towing the watercraft in an emergency.
⑧ **Hood**



① **Fuel tank filler cap**
② **Stern eye**
Use to attach rope for transporting or mooring.
③ **Intake grate**
Prevents debris from getting into the jet pump.
④ **Reverse gate**
Controls direction of jet thrust when in reverse.
⑤ **Ride plate**
⑥ **Jet thrust nozzle**
Changes the direction of jet thrust according to handlebar position.
⑦ **Speed sensor**
⑧ **Stern drain plugs**
Use to drain water in the bilge when the watercraft is on dry land.
⑨ **Cleat**
Use to attach a towrope for pulling water-skier, or a rope for mooring the watercraft.
⑩ **Handgrip**
Use for support when boarding the watercraft or when seated facing rearward and acting as a spotter for a water-skier.
⑪ **Electric bilge pilot outlet**



① **Quick Shift Trim System (QSTS) selector**
Use to select the trim angle of the watercraft.

② **QSTS shift lock lever**

③ **Start switch**
Push to start the engine.

④ **Engine shut-off switch**
Remove the clip to stop the engine and disable it from starting.

⑤ **Clip**
Insert into the engine shut-off switch to enable starting of the engine.
Remove to stop the engine or prevent accidental starting of the engine or unauthorized use of the watercraft.

⑥ **Rearview mirrors**

⑦ **Multifunction meter**
Use to check watercraft operation.

⑧ **Shift lever**
Use to put the watercraft into forward or reverse.

⑨ **Throttle lever**
Use to accelerate and decelerate.

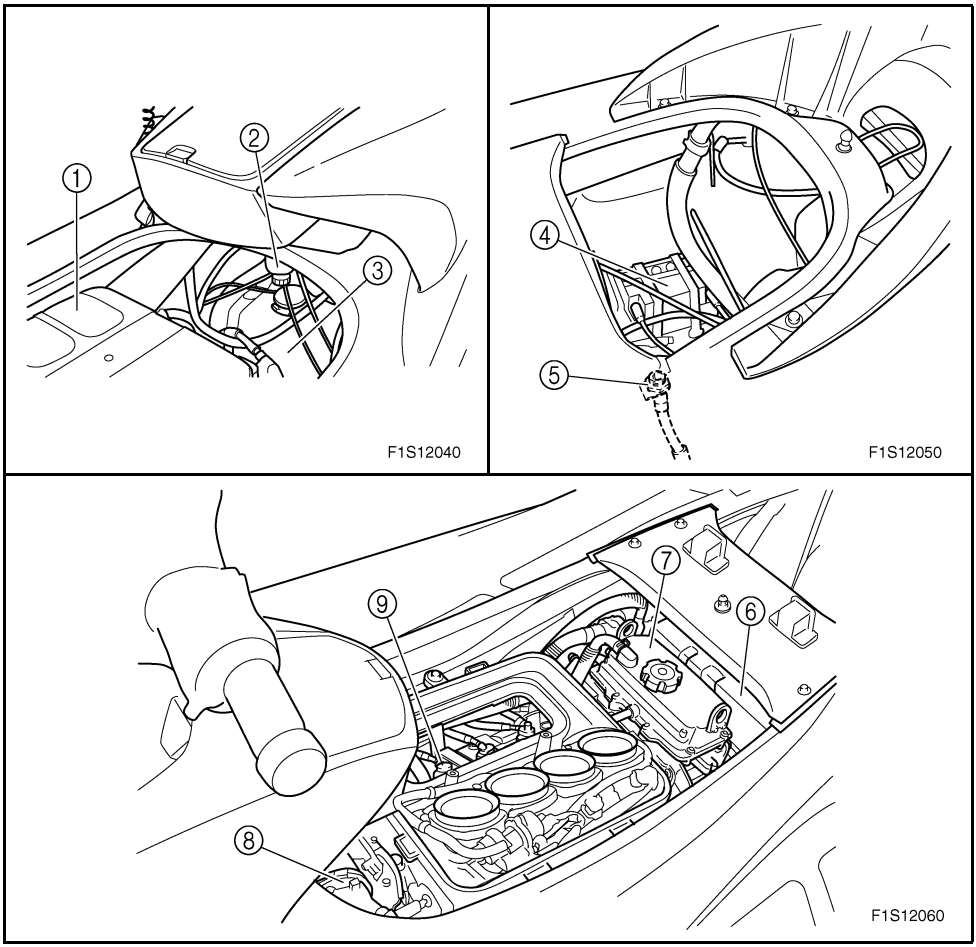
⑩ **Tilt lever**
Use to adjust the tilt of the handlebars.

⑪ **Glove compartment**

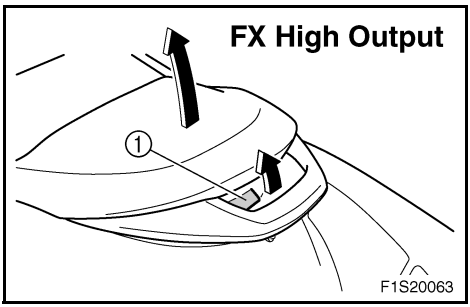
⑫ **Remote controll transmitter**

⑬ **Engine stop switch**
Push to stop the engine normally.

⑭ **Engine shut-off cord (lanyard)**
Attach to wrist so that the engine stops if the operator falls off the watercraft.



① **Air filter case**
② **Water separator**
③ **Fuel tank**
④ **Battery**
⑤ **Flush hose connector**
Use to flush the engine cooling water passages.
⑥ **Electrical box**
Protects electrical components from water.
⑦ **Oil tank**
⑧ **Muffler**
⑨ **Spark plugs/Spark plug caps/Ignition coils**



EJU10090

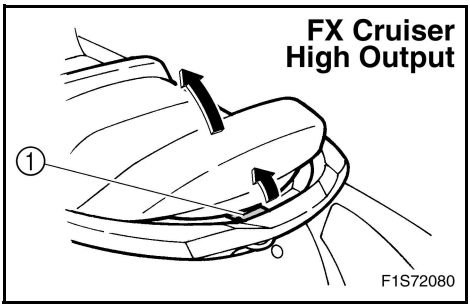
Operation of controls and other functions

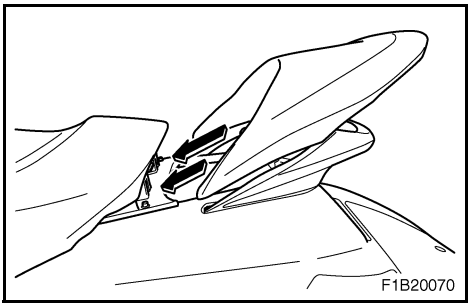
EJU12110

Rear seat

To remove the rear seat:

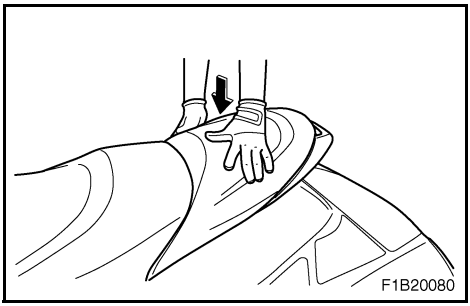
Pull the rear seat latch ① up, and then pull the seat off.

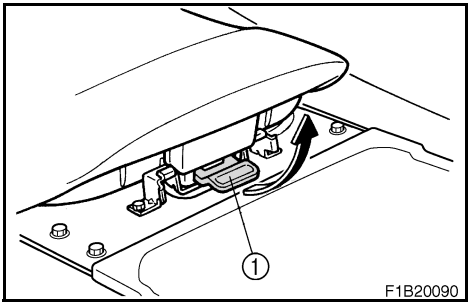




To install the rear seat:

Insert the projections on the front of the seat into the stays on the deck, and then push the rear of the seat down to lock it in place securely.



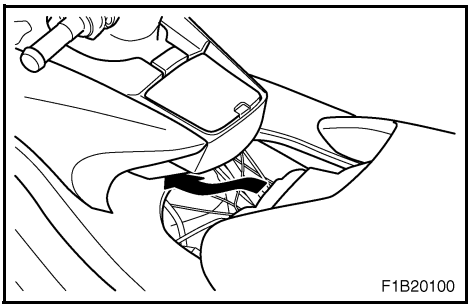


EJU18590

Front seat

To remove the front seat:

1. Remove the rear seat.
2. Pull the front seat latch ① up, and then pull the seat off.

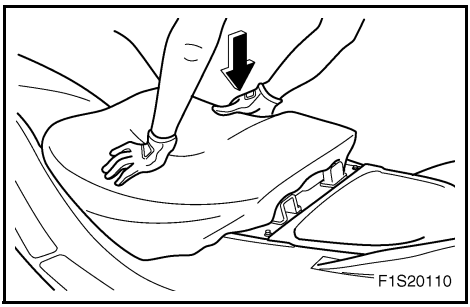


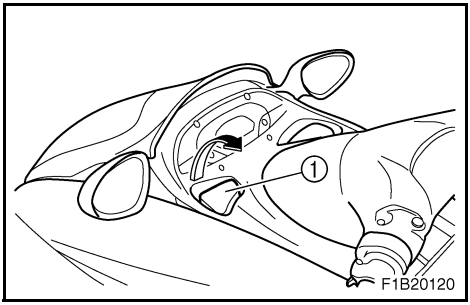
To install the front seat:

1. Insert the projections on the front of the seat into the stays on the deck, and then push the rear of the seat down to lock it in place.
2. Install the rear seat.

NOTE:

Make sure that the seats are properly secured before operating the watercraft.



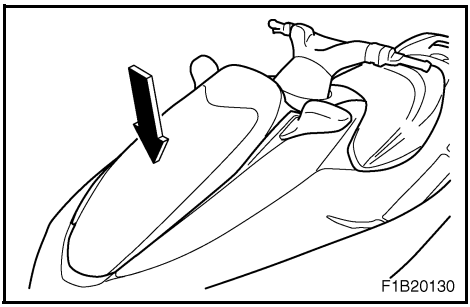


EJU17830

Hood

The hood release lever ① is located on the port (left) side of the watercraft.

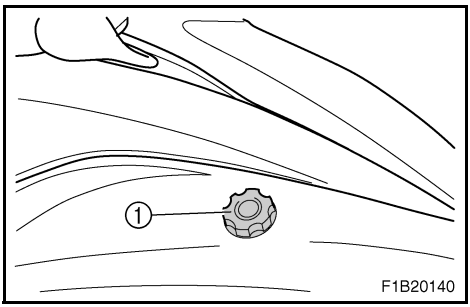
To open the hood, pull the hood release lever up, and then lift the hood up.



To close the hood, push the hood down to lock it in place.

NOTE:

Make sure that the hood is properly secured before operating the watercraft.



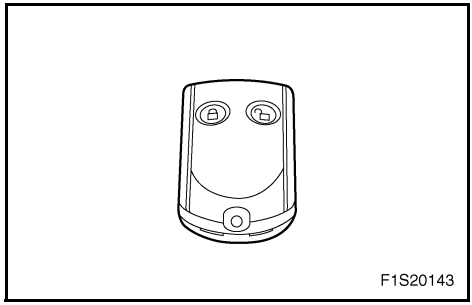
EJU10120

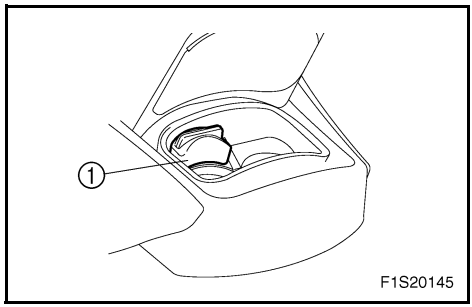
Fuel tank filler cap

To remove the fuel tank filler cap ①, turn it counterclockwise.

NOTE:

Make sure that the fuel tank filler cap is properly secured before operating the watercraft.


F1S20143



F1S20145

EJU20701

Remote control transmitter

The Yamaha Security System and low-RPM mode settings are selected using the remote control transmitter. (See "Yamaha Security System/Low-RPM mode" on page 2-18 for information on using the remote control transmitter.)

CAUTION:

The Yamaha Security System and low-RPM mode settings can only be selected using the remote control transmitter. Observe the following precautions to protect your remote control transmitter:

- **Store the remote control transmitter carefully so it will not be lost. When operating the watercraft, use the transmitter holder ① in the glove compartment. If you accidentally lose your remote control transmitter, contact a Yamaha dealer.**
- **While the remote control transmitter has been designed for use in wet environments, it should not be operated under water or submerged for an extended length of time. If it gets wet, dry it with a soft, dry cloth.**
- **Keep the remote control transmitter away from high temperatures and do not place it in direct sunlight.**
- **Do not drop the remote control transmitter, subject it to strong shocks, or place any heavy items on it.**
- **Use a soft, dry cloth to clean the transmitter. Do not use detergent, alcohol, or other chemicals.**
- **If the remote control transmitter needs a new battery or it is not operating properly, contact a Yamaha dealer. Do not attempt to replace the battery yourself.**

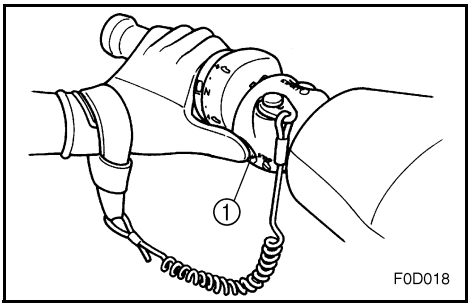
NOTE:

While the engine is running, input from the remote control transmitter is not received.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION:

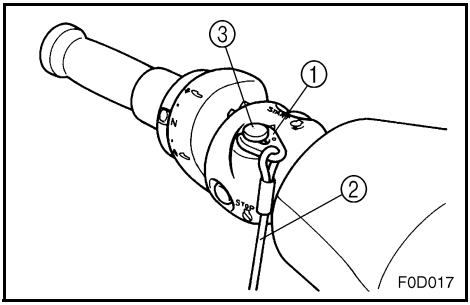
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the remote control transmitter.

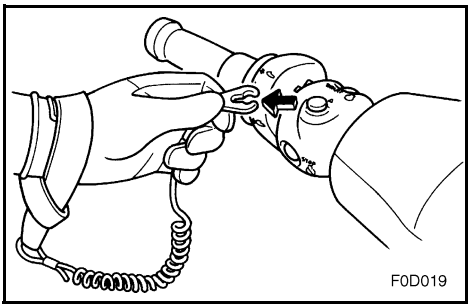


EJU10150

Engine stop switch

Push this switch ① (red button) to stop the engine normally.





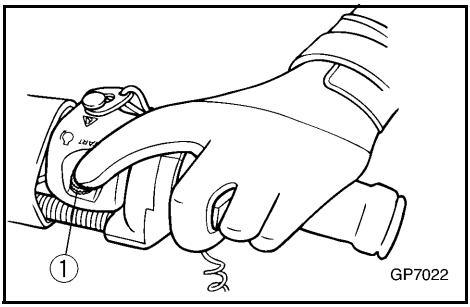
EJU10160

Engine shut-off switch

Insert the clip ①, on the end of the engine shut-off cord ②, under the engine shut-off switch ③ (black button). The engine will stop automatically when the clip is removed from the switch, such as if the operator falls off the watercraft.

⚠WARNING

- **Always attach the engine shut-off cord to your wrist and the clip to the engine shut-off switch BEFORE starting the engine.**
- **To prevent accidental starting of the engine or unauthorized use by children or others, always remove the clip from the shut-off switch when the engine is not running.**



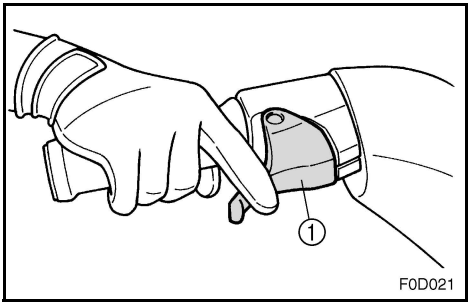
EJU20710

Start switch

Push the start switch ① (green button) to start the engine.

NOTE:

- The engine will not start when the clip is removed from the engine shut-off switch.
- The engine will not start if the lock mode of the Yamaha Security System has been selected. (See page 2-18 for Yamaha Security System and low-RPM mode selection procedures.)

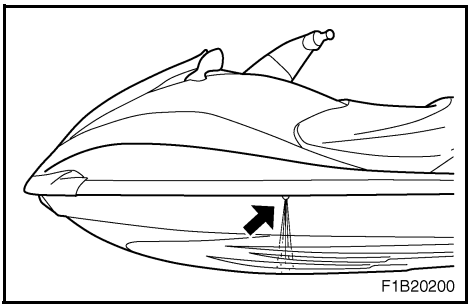


EJU10180

Throttle lever

Squeeze the throttle lever ① to increase engine speed.

Release the throttle lever to decrease engine speed or to return it to the idle position.



EJU17840

Cooling water pilot outlet

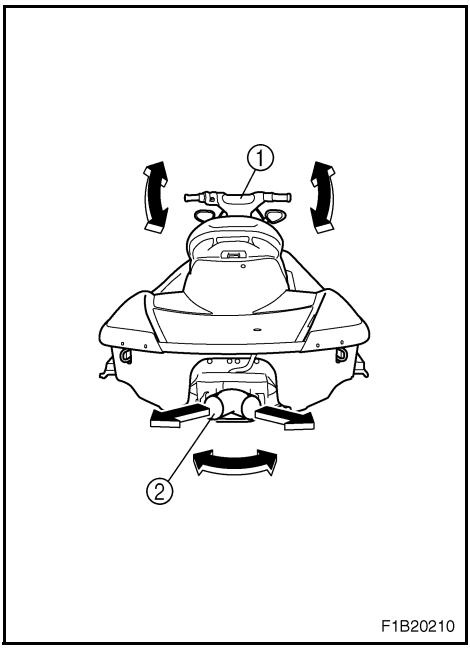
This watercraft is equipped with cooling water pilot outlets.

When the engine is running, cooling water is circulated in the engine, and then it is discharged from the pilot outlets.

To check for proper operation of the cooling system, check that water is being discharged from the port (left) pilot outlet. If water is not being discharged from this outlet, cooling water may not be circulating in the engine. When this occurs, stop the engine and check for the cause. (See pages 2-25 and 5-3 for further instructions.)

NOTE:

- If the cooling water passages are dry, it will take about 60 seconds for the water to reach the outlet after the engine is started.
- Water discharge may not be constant at idle, therefore, open the throttle a little to check that water discharges properly.
- Water discharge may not be constant at the starboard (right) pilot outlet, however, if it is constant at the port (left) pilot outlet, the cooling system is operating normally.



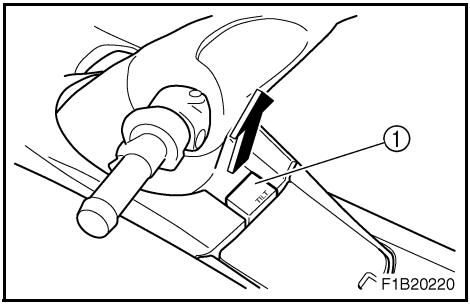
EJU19950

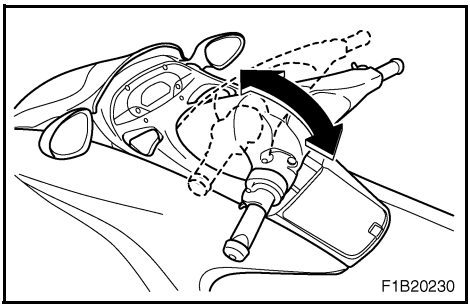
Steering system

Your watercraft can be steered by turning the handlebars ① in the direction you wish to travel.

When the handlebars are turned, the angle of the jet thrust nozzle ② is changed and the direction of the watercraft is changed accordingly. Since the strength of the jet thrust determines the speed and degree of a turn, throttle must always be applied when attempting a turn, except at trolling speed.

This model has the Yamaha Engine Management System (YEMS) that includes an Off-Throttle Steering (OTS) system. It will activate at planing speeds should you attempt to steer the watercraft after releasing the throttle lever. The OTS system assists in turning by continuing to supply some thrust while the watercraft is decelerating, but you can turn more sharply if you apply throttle while turning the handlebars. The OTS system does not function below planing speeds or when the engine is off. Once the engine slows down, the watercraft will no longer turn in response to handlebar input until you apply throttle again or you reach trolling speed.





EJU12170

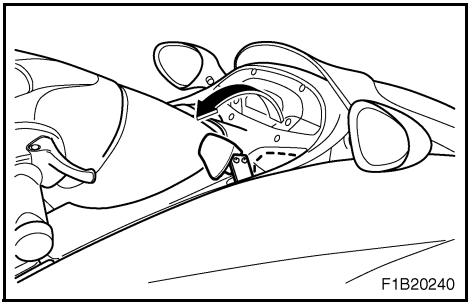
Tilt lever

The tilt lever ① is located in front of the glove compartment and is used to adjust the tilt of the handlebars.

To adjust the tilt, pull the tilt lever up, and then move the handlebars up or down to the desired position.

⚠WARNING

- **Never touch the tilt lever during operation, otherwise the handlebars may suddenly change position, which may lead to an accident.**
- **Be sure to fasten the tilt lever properly after adjusting the handlebar position. If the handlebars are not properly fastened, they may suddenly change position, which may lead to an accident.**


F1B20240

EJU18770

Shift lever

The shift lever is located on the starboard (right) side of the watercraft and is used to control the reverse gate, which allows the watercraft to move into reverse or forward.

When in the reverse position, the watercraft can be launched from a trailer, or backed up out of tight spots where you cannot turn around easily.

To shift into reverse:

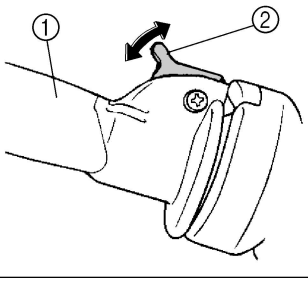
1. Release the throttle, and then let the engine speed return to idle.
2. Pull the shift lever toward you.

⚠WARNING

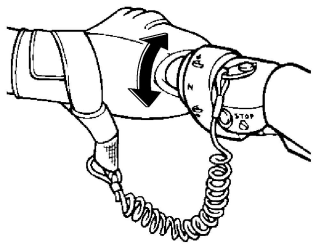
- **Make sure that the throttle is completely released and that the engine is at idle before shifting into reverse.**
- **Do not use the reverse function to slow down or stop the watercraft as it could cause you to lose control, be ejected, or impact the handlebars.**
- **Use reverse for slow-speed maneuvering only.**
- **Make sure that there are no obstacles or people behind you before shifting into reverse.**
- **Do not touch the reverse gate while the shift lever is being operated, otherwise you could be pinched.**

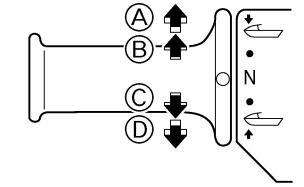
To shift into forward:

1. Release the throttle, and then let the engine speed return to idle.
2. Push the shift lever away from you.

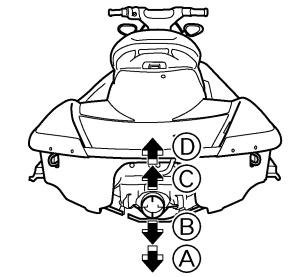


GP7-025





F1B20260



EJU17850

Quick Shift Trim System (QSTS) selector

The QSTS selector ① is located at the left handlebar grip and is used to adjust the trim angle of the watercraft.

Operating the QSTS selector changes the angle of the jet thrust nozzle vertically. This changes the trim angle of the watercraft.

There are 5 positions: 2 bow down positions Ⓐ and Ⓑ, neutral "N," and 2 bow up positions Ⓒ and Ⓓ.

To change the trim angle:

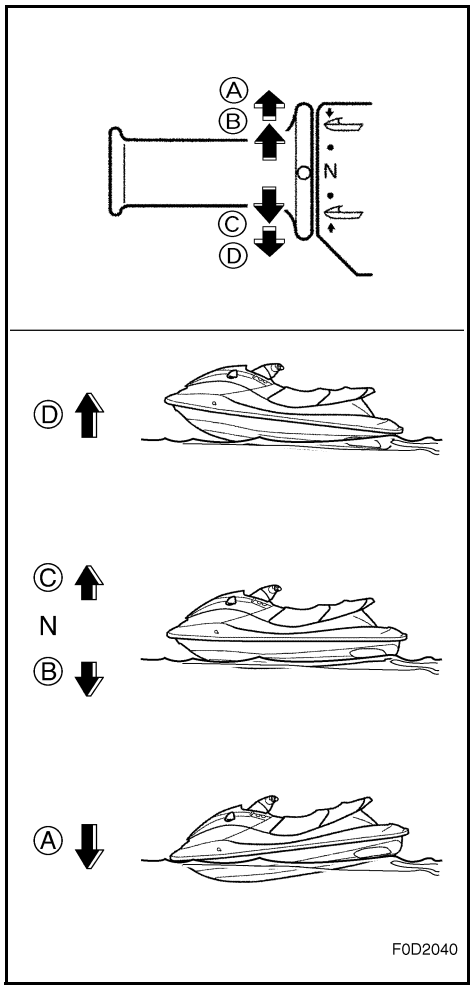
1. Reduce engine speed to 4,000 r/min or less.
2. Squeeze the shift lock lever ②, and then turn the QSTS selector to the desired position.
3. Release the shift lock lever to lock the QSTS selector.

CAUTION:

Do not turn the QSTS selector while operating the watercraft at full throttle, otherwise damage could occur to the QSTS.

The neutral "N" position will provide good performance for most operating conditions.

To enhance particular types of performance, select bow down or bow up.



EJU10230

Bow down

Turn the grip to Ⓐ or Ⓑ and the bow will go down while the watercraft is on plane.

Bow down puts more of the bow in the water. This gives the watercraft more “hook,” which enhances turning performance. This position will also help the watercraft get up on plane more quickly.

At higher speeds, however, the watercraft will have greater tendency to “bow steer” and follow waves and wakes in the water. Fuel economy and maximum speed are also reduced.

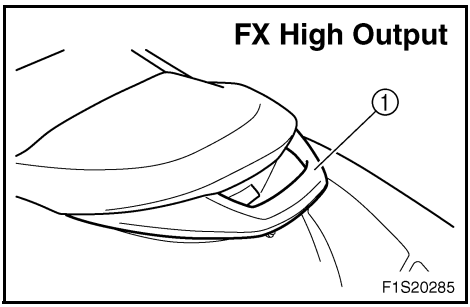
EJU10240

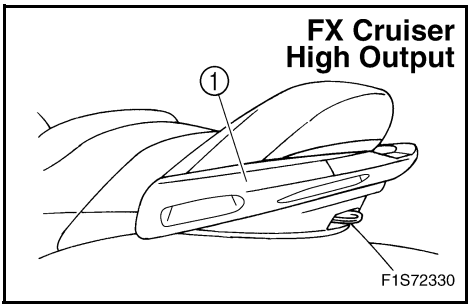
Bow up

Turn the grip to Ⓒ or Ⓓ and the bow will go up while the watercraft is on plane.

Bow up puts less of the bow in the water. There is less water resistance, so straight-ahead acceleration when on plane and top speed are enhanced.

In some conditions, however, the watercraft may tend to “porpoise” (hop in the water). If the watercraft is porpoising, choose neutral or bow down.





EJU19670

Handgrip

The handgrip ① provides a handhold for boarding the watercraft and for a spotter when facing rearward.

⚠WARNING

Do not use the handgrip to lift the watercraft. The watercraft could fall, which could result in severe injury.

EJU19940

Yamaha Engine Management System (YEMS)

This model is equipped with an integrated, computerized management system that controls and adjusts ignition timing, fuel injection, engine diagnostics, and the Off-Throttle Steering (OTS) system.

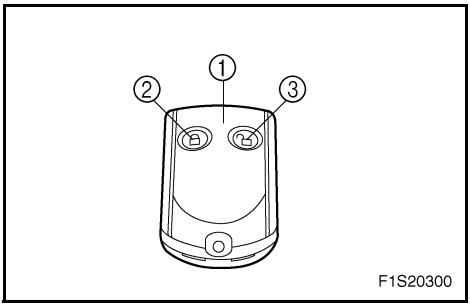
EJU20721

Yamaha Security System/ Low-RPM mode

This watercraft is equipped with a remote control transmitter ① that is used to select the security system and low-RPM mode settings. Since the watercraft is programmed to recognize the internal code from this transmitter only, the security system setting can only be changed with this transmitter. If you lose the remote control transmitter or it does not operate properly, contact a Yamaha dealer.

Yamaha Security System

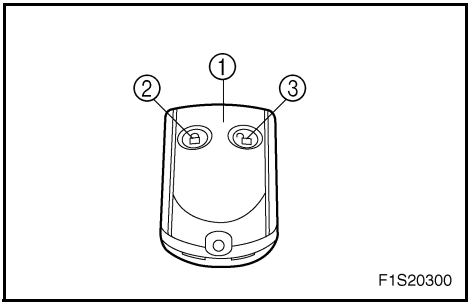
The Yamaha Security System functions to help prevent unauthorized use or theft of the watercraft. The engine cannot be started if the security system is in the lock mode. The engine can only be started in the unlock mode.

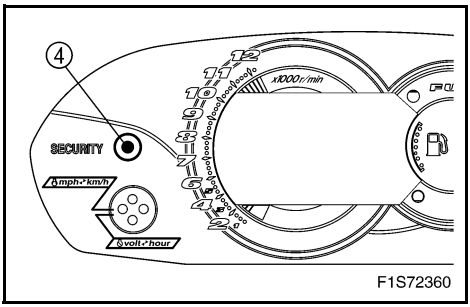


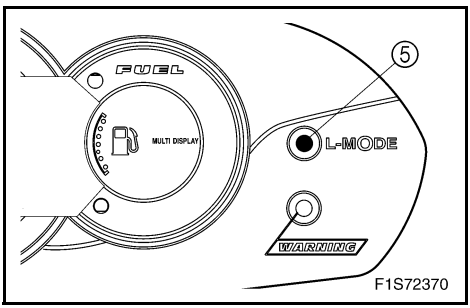
Yamaha Security System lock and unlock modes

The lock and unlock modes of this system can only be selected while the engine is stopped.

When the lock button ② is pressed, the beeper sounds once. This indicates the lock mode is selected and the engine cannot be started.







The “SECURITY” indicator light ④ comes on when the security system is in the unlock mode and goes off when the security system is in the lock mode.

When the unlock button ③ is pressed for a short time, the beeper sounds two times for the normal mode or three times for the low-RPM mode. The “SECURITY” indicator light will come on and the engine can be started. (See the items in “Selecting the normal mode/low-RPM mode” for operation mode information.)

Number of beeps	Yamaha Security System mode	Engine can be started
1 beep	Lock	NO
2 beeps	Unlock (normal mode)	YES
3 beeps	Unlock (low-RPM mode)	YES

Selecting the normal mode/ low-RPM mode

The normal mode and low-RPM mode can only be selected when the engine is stopped in the unlock mode. Press the unlock button for more than 4 seconds to select the normal mode or low-RPM mode.

Normal mode

If the beeper sounds twice, the normal mode is activated.

The watercraft can be ridden normally.

Low-RPM mode

If the beeper sounds three times, the low-RPM mode is activated and the “L-MODE” indicator light ⑤ comes on.

Maximum engine speed (r/min) in the low-RPM mode is limited to approximately 80% of the maximum engine speed in the normal mode.

NOTE:

- If neither the start switch nor the remote control transmitter is operated within 25 seconds after the unlock button is pressed to select the unlock mode, the multifunction meter display and the "L-MODE" indicator light will go off. To change the modes again, press the lock button briefly to select the lock mode, and then press the unlock button again for less than 4 seconds to select the unlock mode.
- While the engine is running, input from the remote control transmitter is not received.

CAUTION:

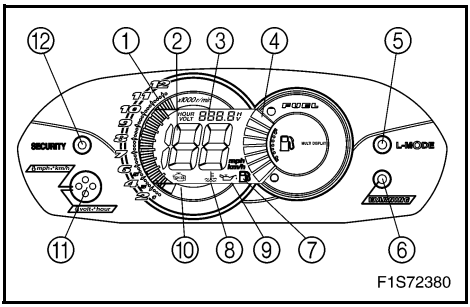
If the remote control transmitter does not operate when its buttons are pressed, the battery may be low. Have a Yamaha dealer replace the battery.

EJU20730

Multifunction meter

This meter contains the following functions for help and convenience in operating the watercraft.

① Tachometer
② Speedometer
③ Hour meter/Voltmeter
④ Fuel meter
⑤ “L-MODE” indicator light
⑥ Warning light
⑦ Fuel warning indicator
⑧ Engine overheat warning indicator
⑨ Oil pressure warning indicator
⑩ Check engine warning indicator
⑪ Select button
⑫ “SECURITY” indicator light



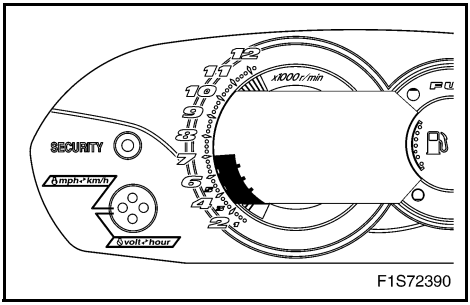
F1S72380

CAUTION:

Do not run the engine for more than 15 seconds when checking the operation of the meter on land. The engine could overheat.

NOTE:

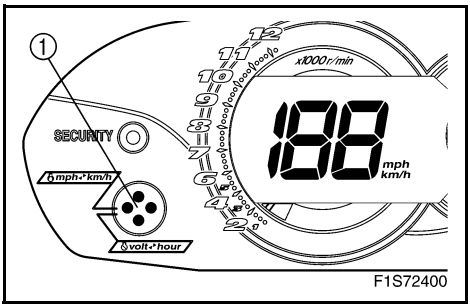
- When the engine is started, all displays light up for 2 seconds and then the meter starts to operate normally.
- The current display will continue to operate for 25 seconds after the engine stops.



EJU17870

Tachometer

The engine speed (r/min) is displayed by segments. Each segment indicates a 250 r/min increment.



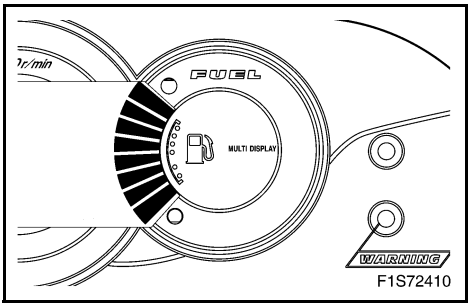
EJU20740

Speedometer

The meter shows the watercraft speed against water.

NOTE:

To switch the speedometer display between kilometers and miles, push the select button ① for at least 1 second, within 10 seconds after the meter is displayed.



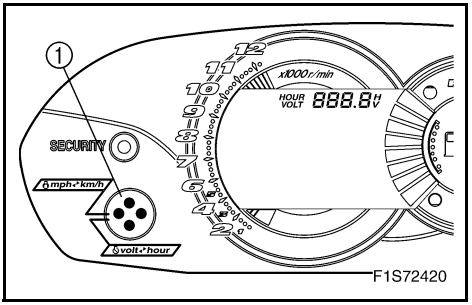
EJU17890

Fuel meter

The fuel meter is provided for convenient fuel level checking while riding. The fuel meter has eight segments which show the amount of fuel remaining in the fuel tank.

NOTE:

The fuel level is most accurate when the watercraft is sitting level on a trailer or in the water.



EJU20750

Hour meter/Voltmeter

NOTE:

To switch the display between the hour meter and voltmeter, push the select button ① for at least 1 second after the meter is displayed for more than 10 seconds.

Hour meter

The hour meter is provided to make it easy to follow the maintenance schedule.

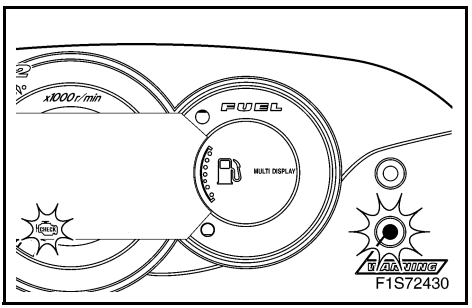
The meter shows the hours of engine operation that have elapsed since the watercraft was new.

Voltmeter

The voltmeter is provided to display the voltage of the battery.

The voltmeter displays 12 volts or more when the battery voltage is within specification.

If the voltage displayed is low, beach the watercraft and, if necessary, have a Yamaha dealer check the charging system.

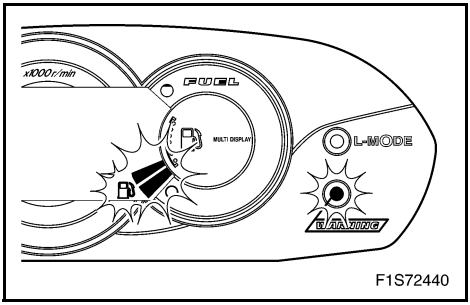


EJU20760

Check engine warning indicator

If a sensor malfunction or a short circuit is detected, the warning light and the check engine warning indicator begin to blink and the buzzer sounds intermittently.

If this occurs, reduce the engine speed, beach the watercraft, and have a Yamaha dealer check the engine.



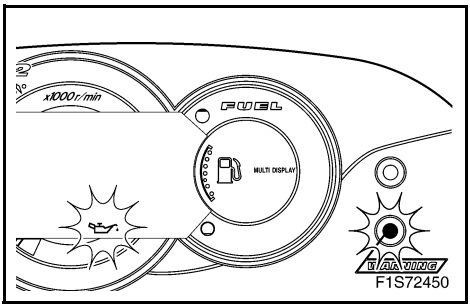
F1S72440

EJU20770

Fuel warning indicator

If the fuel remaining in the tank drops to about 13 L (3.4 US gal, 2.9 Imp gal), the lowest two fuel level segments, the fuel warning indicator, and the warning light all begin to blink. The buzzer also starts sounding intermittently.

The warning signals will be cleared when the engine is restarted after refilling.



F1S72450

EJU20781

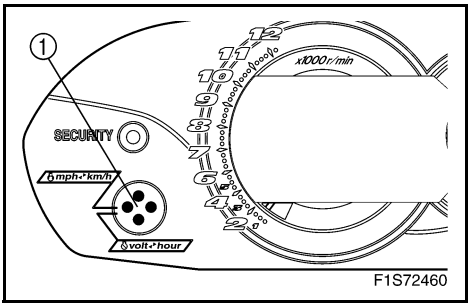
Oil pressure warning indicator

If the oil pressure does not rise to specification, the warning light and the oil pressure warning indicator begin to blink and the buzzer sounds intermittently. At the same time, the engine speed is limited to help prevent damage.

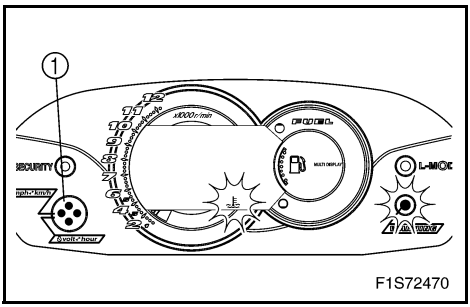
If this occurs, reduce the engine speed, beach the watercraft, and have a Yamaha dealer check the oil pressure.

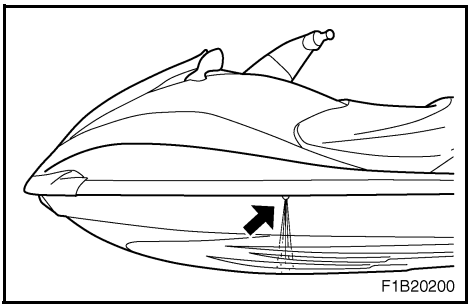
NOTE:

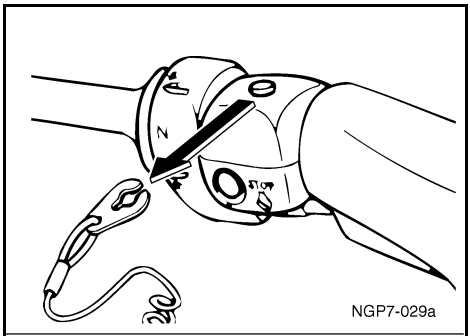
Press the select button ① on the multifunction meter to stop the buzzer.

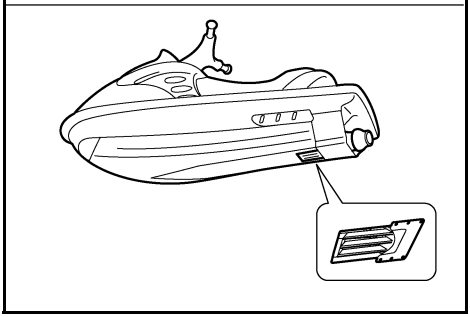


F1S72460









EJU20790

Engine overheat warning indicator

This model is equipped with an engine overheat warning system.

If the engine starts to overheat, the warning light and the overheat warning indicator blink for 5 seconds, and then come on. The buzzer also begins to sound intermittently, and then it sounds continuously. At the same time, the engine speed is limited to 3,000 r/min to help prevent damage.

If this occurs, immediately reduce the engine speed, beach the watercraft, and then check for water discharge at the port (left) cooling water pilot outlet. If there is no discharge of water, check the intake grate and impeller for clogging.

⚠WARNING

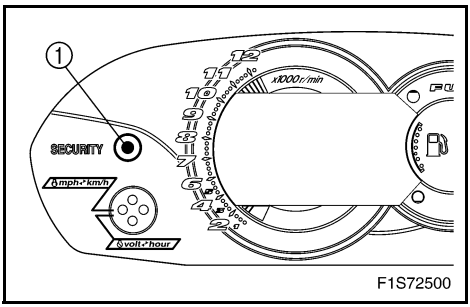
Before attempting to remove weeds or debris from the intake grate or impeller, shut the engine off and remove the clip from the engine shut-off switch. Severe injury or death could result from coming in contact with the rotating parts of the jet pump.

CAUTION:

If you cannot locate and correct the cause of the overheating, consult a Yamaha dealer. Continuing to operate at higher speeds could result in severe engine damage.

NOTE:

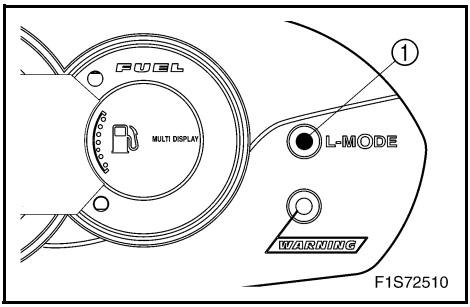
Press the select button ① on the multifunction meter to stop the buzzer.



EJU20800

"SECURITY" indicator light

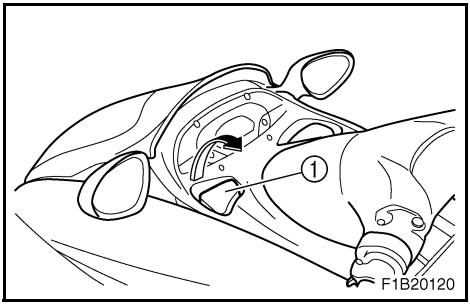
The "SECURITY" indicator light ① comes on when the unlock mode of the Yamaha Security System is selected. The watercraft can be ridden normally when this light is on. (See page 2-18 for more information.)

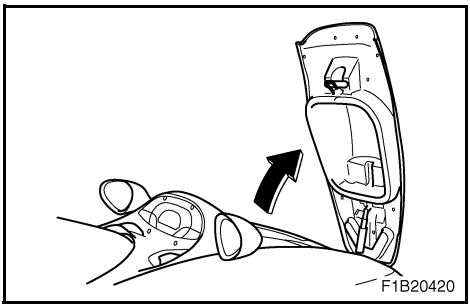


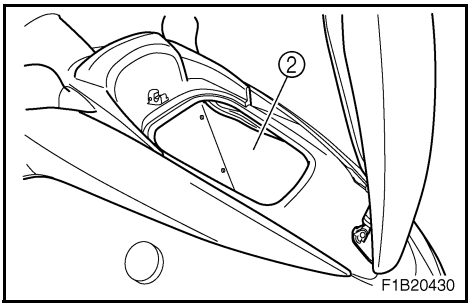
EJU20810

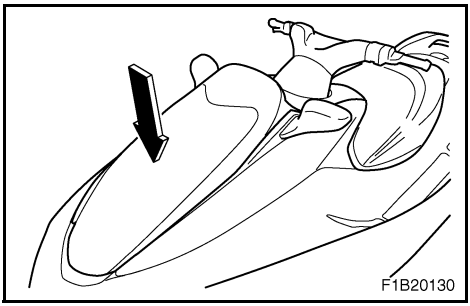
"L-MODE" indicator light

The "L-MODE" indicator light ① comes on when the low-RPM mode is selected. (See page 2-19 for information on the low-RPM mode.)









EJU12360

Storage compartments

A front storage compartment, a glove compartment, and seat storage compartments are provided.

NOTE:

- Make sure that the storage compartments are properly secured before operating the watercraft.
- The storage compartments are not designed to be waterproof. If you carry objects that must be kept dry, such as the manuals, put them in a waterproof bag.

EJU17950

Front storage compartment

The front storage compartment ② is located at the bow.

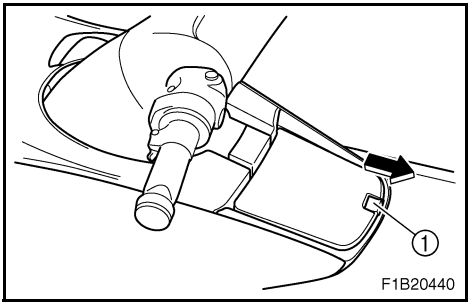
To open the front storage compartment, pull the hood release lever ① up, and then open the hood.

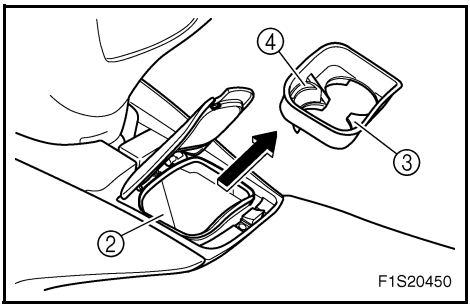
To close the front storage compartment, push down on the rear of the hood until it latches securely.

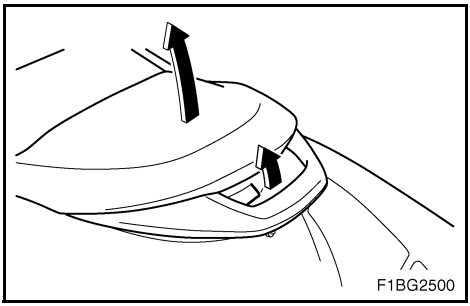
NOTE:

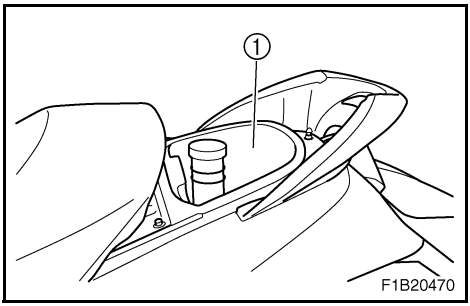
Make sure that the front storage compartment is properly secured before operating the watercraft.

Front storage compartment:
Capacity: 75.0 L
(19.8 US gal, 16.5 Imp gal)
Load limit: 5.0 kg (11 lb)









EJU20820

Glove compartment

A glove compartment ② is located in front of the seat.

To open the glove compartment, slide the latch ① toward you, and then lift up the lid.

To close the glove compartment, push the lid down until it locks securely.

NOTE:

- A removable beverage holder ③ and transmitter holder ④ are provided in the glove compartment. Do not use the beverage holder when operating the watercraft.
- Keep the remote control transmitter in the transmitter holder when operating the watercraft.

Glove compartment:
Capacity: 10.0 L
(2.6 US gal, 2.2 Imp gal)
Load limit: 1.0 kg (2.2 lb)

EJU17970

Seat storage compartment

The seat storage compartment ① is located under the rear seat.

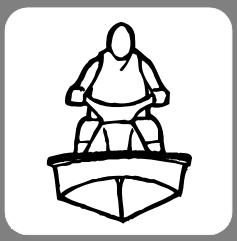
To open the seat storage compartment, remove the rear seat. (See page 2-5 for rear seat removal and installation procedures.)

Seat storage compartment:
Capacity: 15.0 L
(4.0 US gal, 3.3 Imp gal)
Load limit: 9.0 kg (19.8 lb)

E

EJU10400

OPERATION



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3

EJU17980

Fuel and oil

This watercraft is equipped with a 4-stroke engine. Conventional 2-stroke engine oil cannot be used.

The engine utilizes an electronic fuel injection system to deliver the optimal air-fuel mixture ratio required by the engine. With optimal combustion conditions, this system is able to increase startability and improve fuel economy.

EJU19112

Gasoline

⚠WARNING

GASOLINE AND ITS VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE!

- **Do not smoke when refueling, and keep away from sparks, flames, or other sources of ignition.**
- **Stop engine before refueling.**
- **Refuel in a well-ventilated area with the watercraft in a horizontal position.**
- **Do not stand or sit on the watercraft while refueling in case of fire.**
- **Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always properly dispose of gasoline-soaked rags.**
- **Avoid overfilling the fuel tank. Stop filling when the fuel level reaches approximately 50 mm (2 in) from the top of the fuel tank. Fuel expands as it warms up and could overflow if the fuel tank has been overfilled. If temporarily leaving the watercraft with a full fuel tank, do not leave it in direct sunlight. Leave it in a well-ventilated area with the watercraft in a horizontal position.**

- **Tighten the filler cap securely after refueling.**
- **If you should swallow some gasoline, inhale a lot of gasoline vapor, or get gasoline in your eyes, get immediate medical attention.**
- **If any gasoline spills onto your skin, immediately wash with soap and water. Change clothing if gasoline spills on it.**

CAUTION:

Use only fresh gasoline that has been stored in clean containers.

Recommended gasoline:
Regular unleaded gasoline with a minimum octane rating of
86 (Pump octane number) = (R+M)/2
90 (Research octane number)

EJU18320

Gasohol

There are two types of gasohol: gasohol containing ethanol and that containing methanol.

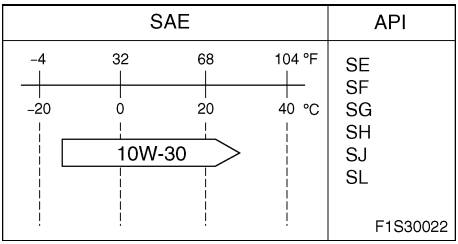
Gasohol containing ethanol can be used if ethanol content does not exceed 10% and the fuel meets minimum octane ratings.

Gasohol containing methanol is not recommended by Yamaha because it can cause fuel system damage or engine performance problems.

EJU17990

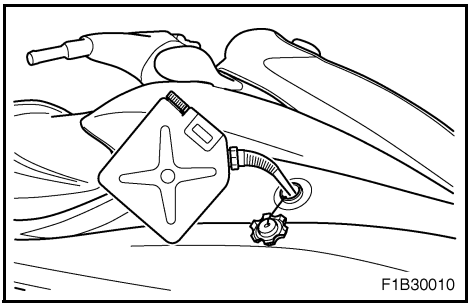
Engine oil

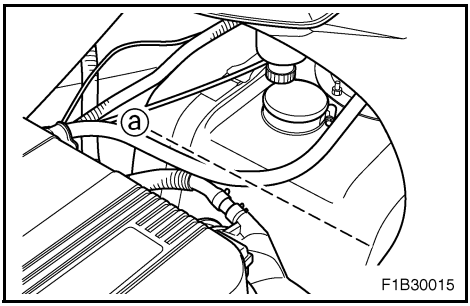
Use a combination of the recommended SAE and API oil classifications shown in the chart below.



CAUTION:

Use only 4-stroke engine oil.





EJU18002

Filling the fuel tank

CAUTION:

Be careful when refueling. Avoid getting water or other contaminants in the fuel tank. Contaminated fuel can cause poor running or engine damage.

1. Remove the rear and front seats. (See pages 2-5 and 2-6 for seat removal and installation procedures.)
2. Open the fuel tank filler cap, and slowly add fuel to the fuel tank.
3. Stop filling when the fuel level reaches approximately 50 mm (2 in) from the top of the fuel tank as indicated ⓐ in the illustration.

Fuel tank capacity:
70.0 L (18.5 US gal, 15.4 Imp gal)

EJU13460

Pre-operation checks

EJU13470

Pre-operation check list

Before operating this watercraft, perform the checks in the following check list. See the accompanying text in this chapter for details on how to perform the checks.

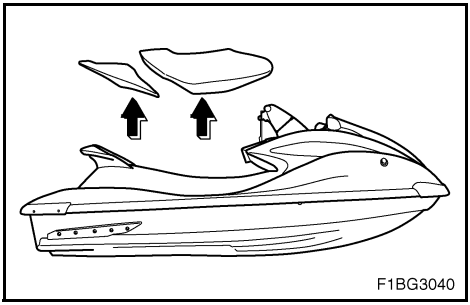
⚠WARNING

If any item in the pre-operation check list is not working properly, have it inspected and repaired before operating the watercraft, otherwise an accident could occur.

ITEM	ROUTINE	PAGE
Engine compartment	Remove all seats to ventilate the engine compartment. Check for fuel vapors and loose electrical connections.	3-5
Bilge	Check for water and fuel and remove if necessary.	3-9
Stern drain plugs	Check for proper installation.	3-10
Throttle lever	Check that the throttle lever springs back smoothly.	3-13
Steering system	Check for proper operation. Check that the handlebars are securely locked.	3-13
Shift lever and reverse gate	Check for proper operation.	3-14
QSTS	Check for proper operation.	3-15
Fuel and oil	Check fuel and oil levels and add if necessary. Check the hoses and tanks for leakage.	3-6, 3-7
Water separator	Check for water and drain if necessary.	3-9
Battery	Check electrolyte level and battery condition.	3-11
Hood	Check that the hood is properly secured.	2-7
Front and rear seats	Check that the seats are properly secured.	2-5, 2-6
Hull and deck	Check the hull and deck for cracks or other damage.	3-5
Jet unit	Check for debris and remove if necessary.	3-16
Fire extinguisher	Check condition and replace if necessary.	3-12
Engine shut-off cord	Check condition and replace if frayed or broken.	3-16
Switches	Check the start switch, engine stop switch, and engine shut-off switch for proper operation.	3-17
Cooling water pilot outlet	Check that water is discharged while the engine is running and the watercraft is in the water.	3-17
Multifunction meter	Check for warning indications and proper operation.	3-17

NOTE:

Pre-operation checks should be made thoroughly each time the watercraft is used. This procedure can be completed in a short time. It is worth the time spent to assure safety and reliability.


F1BG3040

EJU10480
Pre-operation check points

EJU18780
Engine compartment

Ventilate the engine compartment before each use.

To ventilate the engine compartment remove the rear and front seats. (See pages 2-5 and 2-6 for seat removal and installation procedures.) Allow the engine compartment to remain open for a few minutes to allow any fuel vapors to escape. Also, check for loose electrical connections.

⚠WARNING

Failure to ventilate the engine compartment could result in fire or explosion. Do not start the engine if there is a fuel leak or a loose electrical connection.

EJU20570
Hull and deck

Check the hull and deck for cracks or other damage. If any damage is found, have a Yamaha dealer repair the watercraft.

EJU18020

Fuel level

Check the fuel system for leakage, cracks or malfunctions before each use. (See page 4-10 for check points and correct procedures.)

1. Remove the fuel tank filler cap to release any pressure that might have built up in the fuel tank.
2. Remove the rear and front seats. (See pages 2-5 and 2-6 for seat removal and installation procedures.)
3. Check the fuel level in the tank and replenish if necessary. (See page 3-3 for filling instructions.)

EJU20831

Engine oil level

Check the engine oil level before each use.

CAUTION:

- **When checking the engine oil level on water, be careful of other watercraft, boats, swimmers, and obstacles. The water current and wind can cause the watercraft to move and lead to a collision.**
- **When checking the engine oil level on land, supply water to the cooling water passages. (See page 4-1 for procedures on supplying water.)**
- **Make sure that the engine has enough oil but do not overfill it. If there is too little oil, the engine can be damaged. If there is too much oil, the air filter can become saturated with oil, permanently damaging the filter and reducing engine performance. Follow the checking procedure carefully.**
- **Make sure that debris and water do not enter the oil tank filler hole. Debris and water in the engine oil can cause serious engine damage.**

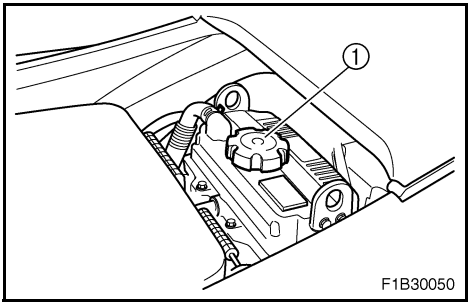
Checking the engine oil level:

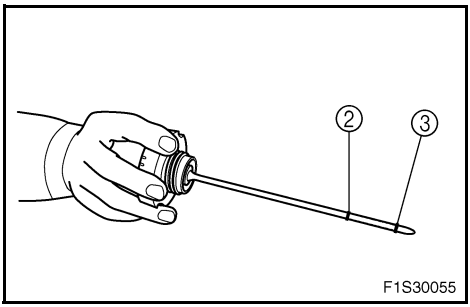
1. Place the watercraft in a horizontal position or launch the watercraft, and then start the engine.
2. Run the engine at trolling speed for 6 minutes or more, and then stop the engine.

NOTE:

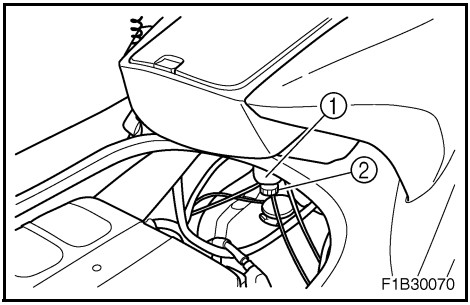
If the ambient temperature is 20 °C (68 °F) or less, warm up the engine for an additional 5 minutes.

3. Remove the rear and front seats. (See pages 2-5 and 2-6 for seat removal and installation procedures.)





4. Remove the oil tank filler cap ①, wipe the dipstick clean, and then screw the filler cap into the filler hole completely. Remove the filler cap again and check that the oil level is between the minimum level mark ③ and maximum level mark ② on the dipstick.
5. If the oil level is below the minimum level mark, add enough oil so that the oil level is between the minimum and maximum level marks on the dipstick, and then install the filler cap. If the engine oil level is significantly above the maximum level mark, the oil tank is overfilled. Have a Yamaha dealer remove the excessive amount of engine oil.



EJU19610

Water separator

Check the water separator ① for water. Normally the water separator is empty. The water separator retains any water entering through the fuel tank breather hose if the watercraft is capsized.

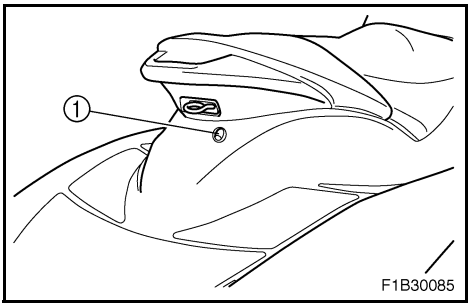
If water remains in the water separator, drain it by removing the drain screw ②. Place a drain pan under the water separator to catch the draining water or use a dry cloth to soak up any water that could spill into the watercraft. If any water spills into the watercraft, be sure to wipe it up with a dry cloth. Be sure to install the drain screw after draining the water separator.

EJU18042

Bilge

Check for moisture and fuel residue in the bilge.

This watercraft is equipped with a conventional jet vacuum bilge draining system and an electric bilge draining system. The electric bilge draining system is operated when the engine is running. When excess water reaches the water inlet of the electric bilge pump, the water is discharged from the electric bilge pilot outlet ① at the stern.



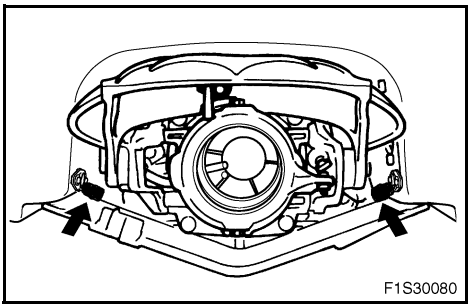
A small quantity of water will remain in the bilge and should be removed manually. To remove any residual water, beach the watercraft and perform the following procedure.

CAUTION:

If starting the engine after it has capsized, do not operate the engine at full open throttle when water is being discharged from the electric bilge pilot outlet at the stern. Excessive water in the bilge can splash into the engine which could cause damage.

To remove water from the bilge:

1. Remove the stern drain plugs.
2. Raise the bow of the watercraft until the water drains.
3. After the water has drained, wipe the bilge with dry rags to make sure that the bilge is thoroughly dry.
4. Install the drain plugs.



EJU20581

Stern drain plug

Check the stern drain plugs for proper installation.

CAUTION:

- **Make sure that the stern drain plugs are tightened securely before launching the watercraft. Otherwise, water may flood the engine compartment and cause the watercraft to submerge.**
- **Clean any foreign materials, such as dirt or sand, from the drain plug threads before installing the drain plugs. Otherwise, the drain plugs may be damaged and water may enter the engine compartment.**

EJU19690

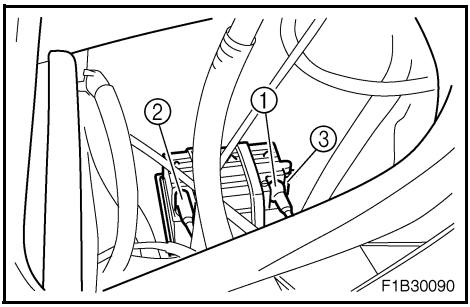
Battery

Check the battery condition and the electrolyte level.

Check that the battery leads are tightened securely and there is no corrosion on the battery terminals.

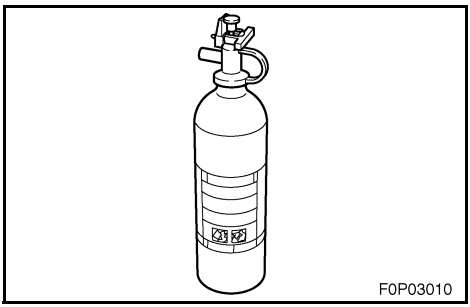
⚠WARNING

- **The battery must always be fully charged and in good condition. Loss of battery power may leave you stranded. Never operate the watercraft if the battery does not have sufficient power to start the engine or if it shows any other signs of decreased power.**
- **Be sure to connect the breather hose to the battery. Fire or explosion could result if the breather hose is damaged, obstructed, or not connected properly.**



Make sure that the battery is securely held in place.

① Positive (+): Red lead
② Negative (–): Black lead
③ Breather hose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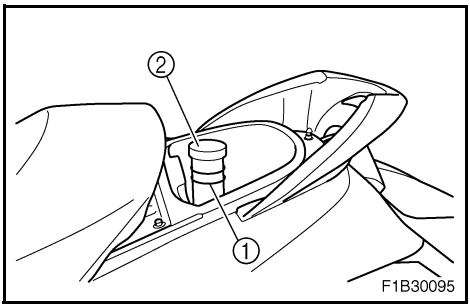


F1B30095

EJU18050

Fire extinguisher

Check that there is a full fire extinguisher on board. The fire extinguisher container ① is located in the seat storage compartment.

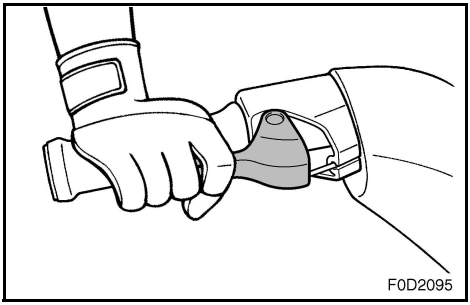
To open the fire extinguisher container cap ②, turn it counterclockwise.

After inserting the fire extinguisher make sure that the container cap is tightened securely.

NOTE:

- See the instructions supplied by the fire extinguisher manufacturer for checking the fire extinguisher. Always keep the extinguisher in the fire extinguisher container.
- Always carry a fire extinguisher on board. A fire extinguisher is not standard equipment with this watercraft. If you do not have one, contact a Yamaha dealer or a fire extinguisher dealer to obtain one meeting the proper specifications.

Fire extinguisher:
Classification: B-1
Capacity: 2 lb or more



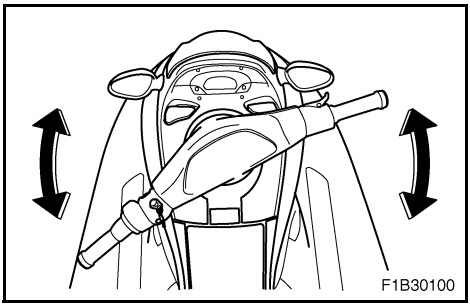
EJU18340

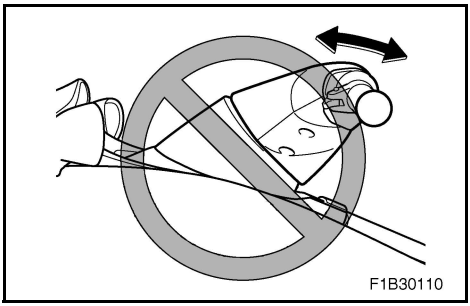
Throttle

Squeeze and release the throttle lever several times to make sure that there is no hesitation in its travel. It should be smooth over the complete range, and spring back to the idle position when released.

⚠WARNING

Before starting the engine, always check the operation of the throttle lever.





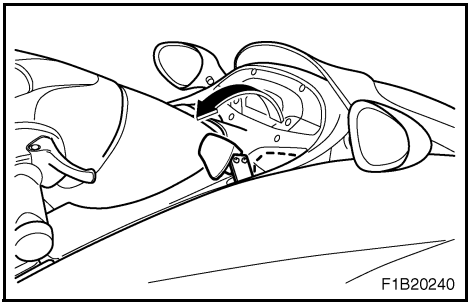
EJU18480

Steering system

Check for looseness in the handlebars.

Turn them as far as possible to the right and left to make sure that operation is smooth and unrestricted throughout the whole range. Make sure that the jet thrust nozzle also changes directions as the handlebars are turned, and that there is no free play between the handlebars and the jet thrust nozzle.

Check that the handlebars are locked in position. (See “Tilt lever” on page 2-13 for more information.)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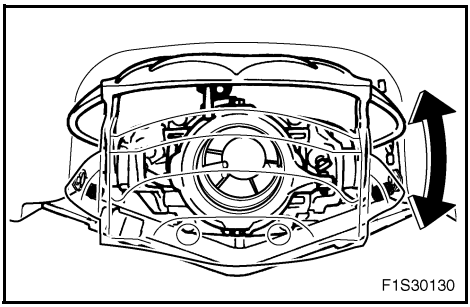

F1S30130

EJU12450

Shift lever and reverse gate

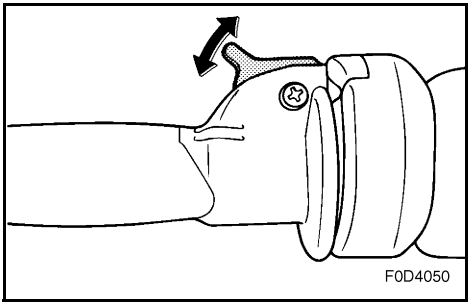
Check for proper operation of the shift lever and reverse gate.

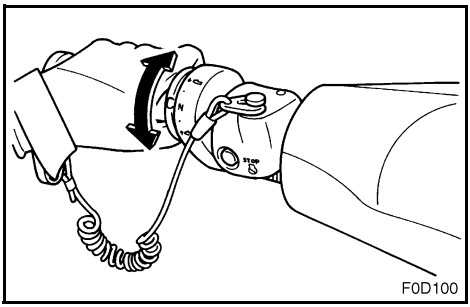
Make sure that the reverse gate goes down to its stopper position when the shift lever is pulled up.

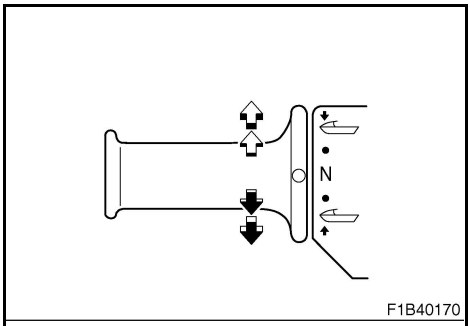
Also, make sure that the reverse gate goes up to its stopper position when shift lever is pushed down.

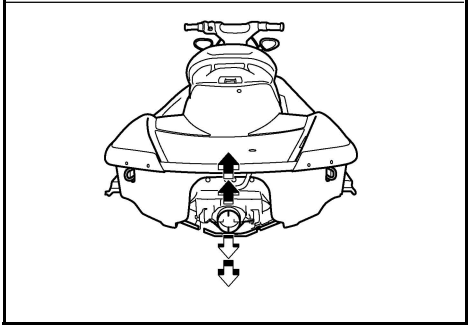
⚠WARNING

- **Make sure that the throttle is completely released and that the engine is at idle before shifting into reverse.**
- **Do not use the reverse function to slow down or stop the watercraft as it could cause you to lose control, be ejected, or impact the handlebars.**
- **Use reverse for slow-speed maneuvering only.**
- **Make sure that there are no obstacles or people behind you before shifting into reverse.**
- **Do not touch the reverse gate while the shift lever is being operated, otherwise you could be pinched.**









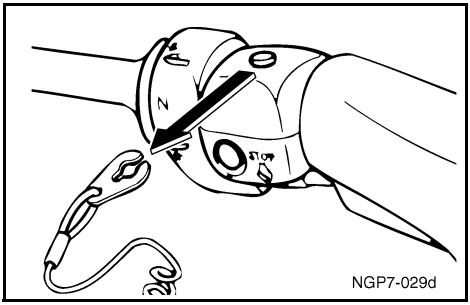
EJU20620

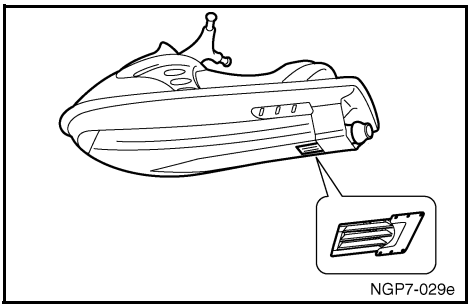
Quick Shift Trim System (QSTS)

Check the shift lock lever and the QSTS selector for proper operation.

1. Operate the shift lock lever and the QSTS selector to check that they operate properly.
2. Check that the QSTS selector locks when the lever is released.
3. Check that the selector turns smoothly when the lever is squeezed and held in place.
4. Check that the angle of the jet thrust nozzle changes when the selector is shifted from neutral to bow up or bow down.

If the mechanism does not work properly, have a Yamaha dealer service it.





EJU10580

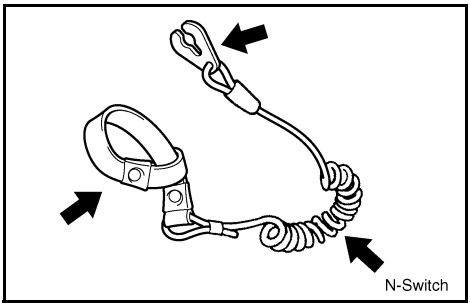
Jet unit

Carefully check the jet intake for weeds, debris, or anything else that might restrict the intake of water. If the intake is clogged, cavitation could occur, reducing jet thrust, and possibly damaging the jet pump.

In some cases, the engine may overheat because of lack of cooling water, and damage to the engine could result. Engine cooling water is fed to the engine by the jet pump. (See page 5-3 for jet intake cleaning procedures.)

⚠WARNING

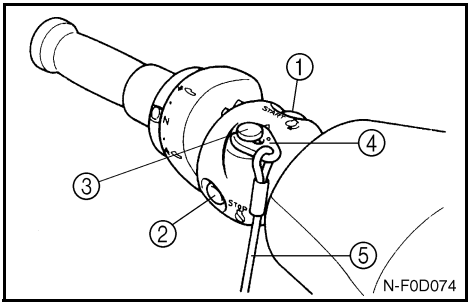
- **Keep away from intake grate while engine is on. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts resulting in severe injury or drowning.**
- **Stop the engine and remove the clip from the engine shut-off switch before removing any debris or weeds, which may have collected around the jet intake.**



EJU10590

Engine shut-off cord (lanyard)

Check that the engine shut-off cord is not frayed or broken. If the cord is damaged, replace it; never try to repair it or tie it together.



EJU18352

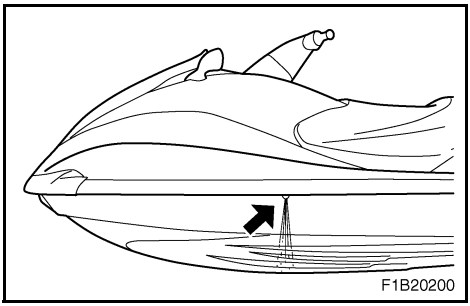
Switches

CAUTION:

Do not run the engine of the watercraft for more than 15 seconds on land without supplying water, otherwise the engine may overheat.

Check the start switch, the engine stop switch, and the engine shut-off switch for proper operation.

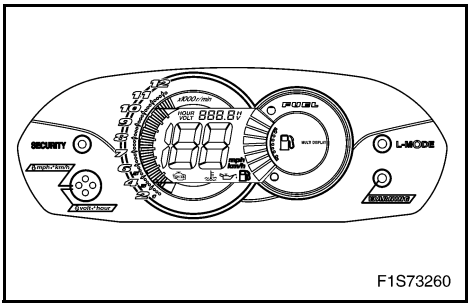
Push the start switch ① to start the engine. As soon as the engine starts running, push the engine stop switch ② to verify that the engine stops immediately. Restart the engine, and then pull the engine shut-off cord ⑤ to remove the clip ④ from the engine shut-off switch ③ to verify that the engine stops immediately. (See pages 2-9 to 2-10 for information on proper operation of the start switch, the engine stop switch, and the engine shut-off switch.)



EJU18060

Cooling water pilot outlet

Check that water comes out from the port (left) pilot water outlet while the engine is running and the watercraft is in the water. (See page 2-11 for further instructions.)



EJU12460

Multifunction meter

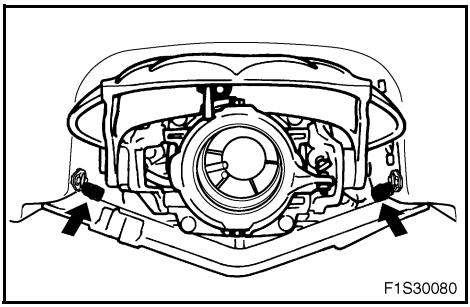
Check the operation of the multifunction meter. (See pages 2-21 to 2-26 for operation of the meter.)

EJU18360

Operation

⚠WARNING

Before operating your watercraft, become familiar with all controls. Consult your Yamaha dealer about any control or function you do not fully understand. Failure to understand how controls work could cause an accident or prevent you from avoiding an accident.


F1S30080

CAUTION:

Make sure that the stern drain plugs are securely tightened before launching the watercraft.

EJU18071

Engine break-in

The engine break-in period is essential to allow the various components of the engine to wear and polish themselves to the correct operating clearances. This ensures proper performance and promotes longer component life.

CAUTION:

Be sure to check the engine oil level before operating the watercraft for the first time. (See page 3-7 for engine oil checking procedures.)

1. Launch the watercraft and start the engine. (See page 3-20 for engine starting procedures.)

2. For the first 5 minutes, run the engine at trolling speed only. For the 30 minutes of operation after that, keep the engine speed below 5,000 r/min. For the 1 hour of operation after that, keep the engine speed below 8,000 r/min.
3. Proceed with normal operation.

CAUTION:

Failure to follow the engine break-in procedure could result in reduced engine life or even severe engine damage.

EJU21060

Launching the watercraft

Make sure that there are no obstructions behind you.

Use the remote control transmitter to select the unlock mode. (See page 2-18 for Yamaha Security System and low-RPM mode selection procedures.)

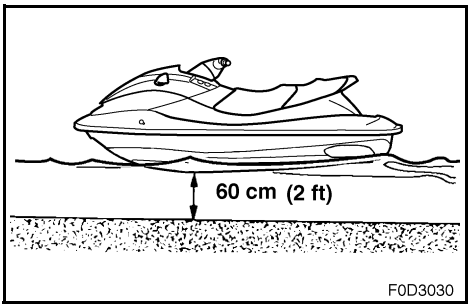
After the watercraft is in the water, start the engine. Shift into reverse and move the watercraft back slowly. If there are waves, someone should make sure that the watercraft is not pushed into the trailer before backing away.

EJU20840

Starting the engine

⚠WARNING

Never start the engine or let it run for any length of time in an enclosed area. Exhaust fumes contain carbon monoxide, a colorless, odorless gas that may cause loss of consciousness and death within a short time. Always operate the watercraft in an open area.



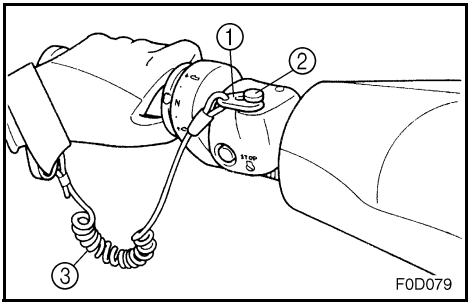
1. If the lock mode of the Yamaha Security System is selected, use the remote control transmitter to select the unlock mode. (See page 2-18 for Yamaha Security System and low-RPM mode selection procedures.)
2. Launch the watercraft in water free from weeds and debris and at least 60 cm (2 ft) deep.

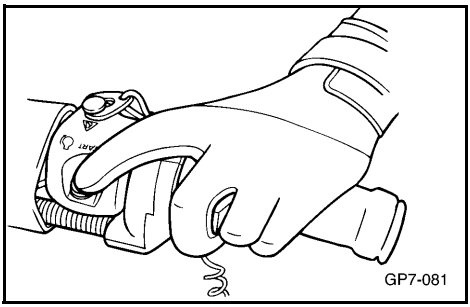
⚠WARNING

Never operate in water that is less than 60 cm (2 ft) deep, otherwise you increase your chance of hitting a submerged object, which could result in injury.

CAUTION:

Never operate in water that is less than 60 cm (2 ft) deep, otherwise pebbles or sand could be sucked into the jet intake, causing impeller damage or engine overheating.





3. Attach the clip ① to the engine shut-off switch ② and attach the engine shut-off cord ③ to your left wrist.

⚠WARNING

Check that the engine shut-off cord is not frayed or broken, and keep it free from the handlebars so the engine stops if the operator falls off. The engine shut-off cord may not pull free if wrapped around the handlebars when the operator falls off, allowing the watercraft to continue to run and cause an accident.

NOTE:

It is not possible to start the engine with the clip removed from the engine shut-off switch.

4. Push the start switch (green button).

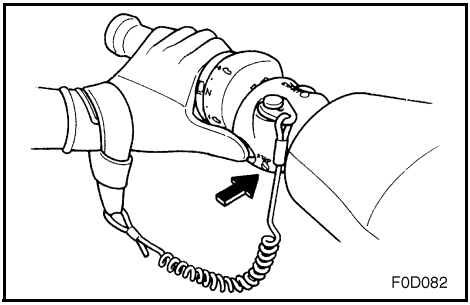
NOTE:

The engine will not start if the throttle lever is squeezed.

5. Release the start switch as soon as the engine starts to run.

CAUTION:

- **Never push the start switch while the engine is running.**
- **Do not operate the start switch for more than 5 seconds, otherwise the battery will be discharged and the engine will not start. Also, the starter motor may be damaged. If the engine does not start in 5 seconds, release the start switch, wait 15 seconds, and then try again.**



EJU10660

Stopping the engine

To stop the engine, release the throttle lever, and then push the engine stop switch (red button).

⚠WARNING

You need throttle to steer. Shutting off the engine can cause you to hit an obstacle you are attempting to avoid. A collision could result in severe injury or death.

EJU20850

Leaving the watercraft

If leaving the watercraft, select the lock mode of the Yamaha Security System and remove the engine shut-off cord to reduce the chance of accidental starting or unauthorized use by children or others. (See page 2-18 for Yamaha Security System and low-RPM mode selection procedures.)

EJU10680

Operating your watercraft

EJU11650

Getting to know your watercraft

Operating your watercraft requires skills acquired through practice over a period of time. Take the time to learn the basic techniques well before attempting more difficult maneuvers.

Operating your new watercraft can be a very enjoyable activity, providing you with hours of pleasure. However, it is essential to familiarize yourself with the operation of the watercraft to achieve the skill level necessary to enjoy riding safely. Before operating this watercraft, read this Owner's/Operator's Manual, the Riding Practice Guide, the Riding Instruction card and all warning and caution labels on the watercraft. Pay particular attention to the safety information on pages 1-9 to 1-16. Also, watch the Basic Orientation Video provided with your watercraft. These materials should give you an understanding of the watercraft and its operation.

Remember: This watercraft is designed to carry the operator and up to 2 passengers. Never exceed the maximum load limit or allow more than 3 persons (or 2 persons if a water-skier is being pulled) to ride the watercraft at one time.

Maximum load: 240 kg (530 lb)
Load is the total weight of cargo, operator and passengers.

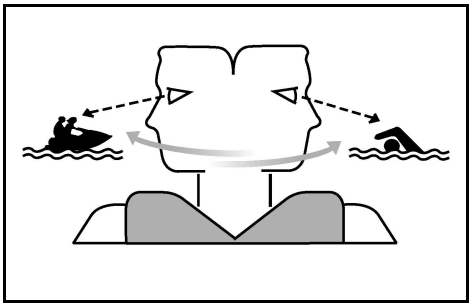
EJU11910

Learning to operate your watercraft

Before operating the watercraft, always perform the pre-operation checks listed on page 3-4. The short time spent checking the watercraft will reward you with added safety and reliability.

Check state and local laws before operating your watercraft.

Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft. Select a wide area to learn in, where you have good visibility and light boat traffic.



Use the buddy system—operate with someone nearby. Scan constantly for people, objects, and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.

Attach the engine shut-off cord (lanyard) to your wrist and keep it free from the handlebars so that the engine stops if the operator falls off.

Wear a personal flotation device (PFD). All riders must wear a Coast Guard approved PFD that is suitable for personal watercraft use.

Wear protective clothing. Severe internal injuries can occur if water is forced into body cavities as result of falling into the water or being near the jet thrust nozzle. Normal swimwear does not adequately protect against forceful water entry into rectum and vagina. All riders must wear a wetsuit bottom or clothing that provides equivalent protection.

Such clothing includes thick, tightly woven, sturdy and snug-fitting apparel such as denim, but does not include spandex or similar fabrics like those used in bicycle shorts. A full wetsuit can also protect against hypothermia (subnormal body temperature) and abrasions.

Footwear and gloves are recommended.

Eye protection is recommended to keep wind, water, and glare from the sun out of your eyes while you operate your watercraft. Restraining straps for eyewear are made which are designed to float should your eyewear fall in the water.

You should grip the handlebars firmly and keep both feet on the floor of the footwell. Do not attempt to ride with passengers until your operating skills are fully developed.

EJU18092

Riding watercraft with passengers

When 2 or 3 persons (including the operator) are on board, the watercraft handles differently, and is not as easy to maneuver, so operating it requires a higher degree of skill. Before attempting to operate the watercraft with passengers on board, the operator must practice operating the watercraft alone enough to be able to acquire the necessary skills.

The passengers must always wear USCG approved PFD and wetsuit bottom or equivalent.

⚠WARNING

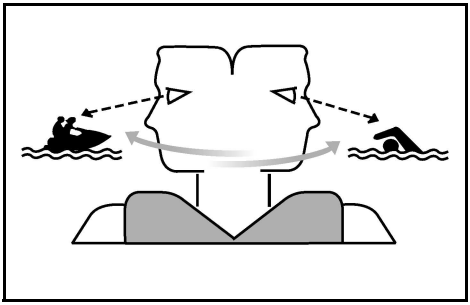
Do not apply throttle when anyone is at rear of watercraft. Turn engine off or keep engine at idle. Water and/or debris exiting the jet thrust nozzle can cause severe injury. Passengers should not attempt to board the watercraft if the operator is applying throttle.

Do not give a ride to children whose feet cannot reach the floor of the footwell. The passengers should hold on firmly, either to the person in front of them or to the handgrip provided, and keep both feet on the floor of footwell.

⚠WARNING

When passengers are on board, make sure that they are holding on firmly and have feet in the footwell before you start to accelerate.

When pulling a skier, the spotter should face to the rear while holding the handgrip with both hands. The spotter should always sit astride the seat with his or her feet placed firmly on the floor of the footwell for proper balance. Follow state laws regarding skiing such as skier-down flags, rearward-facing spotter, and other requirements.

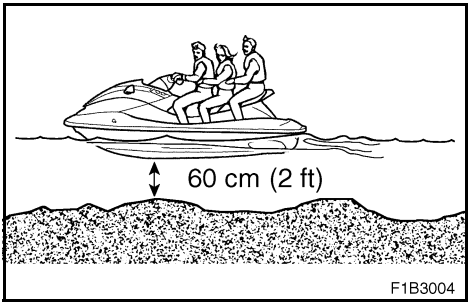


EJU18370

Starting the watercraft

⚠WARNING

- **Scan constantly for people, objects, and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.**
- **Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft.**
- **Do not follow directly behind watercraft or other boats. Do not go near others to spray or splash them with water. Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going. Avoid areas with submerged objects or shallow water.**
- **Take early action to avoid collisions. Remember watercraft and other boats do not have brakes. Do not release the throttle when trying to steer away from objects—you need throttle to steer.**
- **Practice reboarding in shallow water before riding in deep water.**



EJU10730

Starting and boarding in shallow water

1. Do not start the engine in less than 60 cm (2 ft) of water. Put the watercraft in water that is deep enough, and then board the watercraft from the side or the rear.
2. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
3. Grip the handlebars with both hands, place both feet on the floor of the foot-well, start the engine, and start off.

EJU10740

Starting from a dock

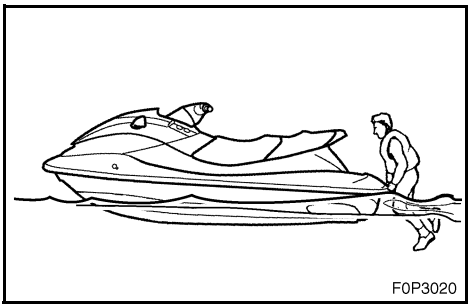
1. Board the watercraft from the side.
2. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
3. Push the watercraft away from the dock, grip the handlebars with both hands, place both feet on the floor of the foot-well, start the engine, and start off.

EJU10750

Boarding and starting in deep water

⚠WARNING

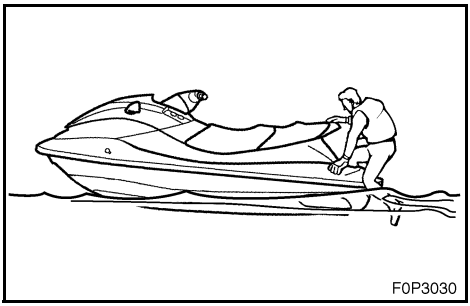
- **Operator and passenger should practice getting on board in shallow water before riding in deep water. Boarding in deep water requires more skill.**
- **The fatigue and exposure that could result after unsuccessful attempts to get back on the watercraft may increase the risk of injuries and drowning.**


F0P3020

EJU18380

Boarding alone

1. Swim to the rear of the watercraft and place both hands on the boarding platform, pull yourself up, and then grasp the handgrip with one hand.
2. Pull yourself up to a kneeling position on the platform, and then move to the seat and sit astride.
3. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
4. Grip the handlebars firmly with both hands, place both feet on the floor of the footwell, start the engine, and then look in all directions before starting off.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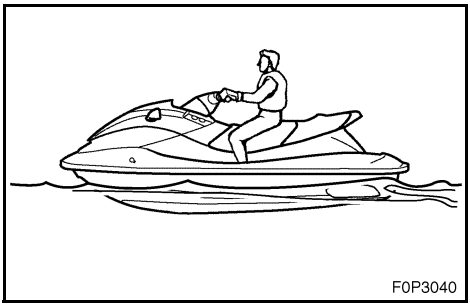
⚠WARNING

Before starting off, make sure that there are no boats, obstructions, or swimmers around you.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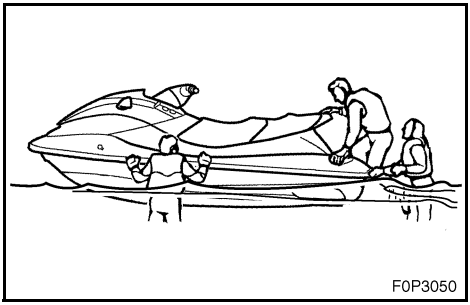
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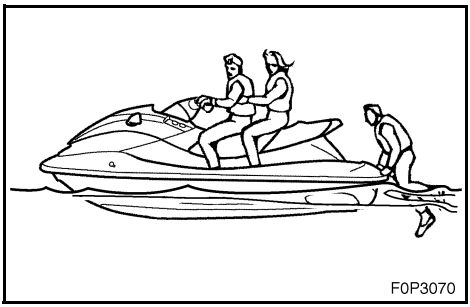
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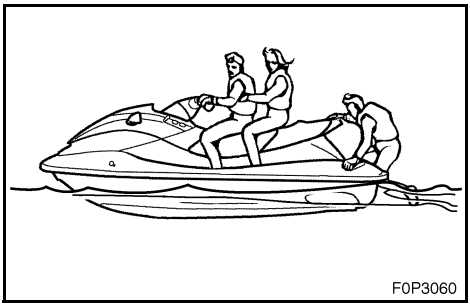
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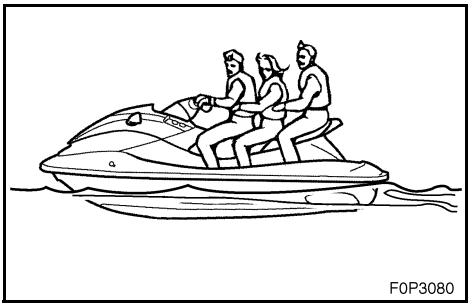
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EJU21130

Boarding with passengers

⚠WARNING

Severe internal injuries can occur if water is forced into body cavities as a result of being near the jet thrust nozzle. Do not apply throttle until the passengers are seated with their feet on the floor of the footwell and are securely holding on to the person in front of them or to the handgrip provided.

1. Climb on board as noted in the previous section, and sit astride the seat. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
2. Have the passenger move to the rear of the watercraft.
3. Have the passenger get on board and sit on the seat. If a second passenger is getting on, have him or her follow the same procedure.

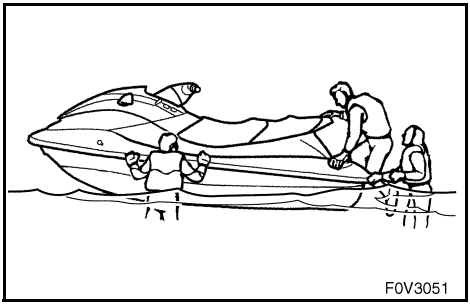
NOTE:

When a passenger is getting on board, both he and the operator should try to balance the watercraft.

4. The operator should check to see that the passengers have their feet on the floor of the footwell and that they are securely holding on to the person in front of them or to the handgrip provided.
5. Start the engine, look in all directions, and then accelerate to planing speed.

⚠WARNING

Before starting off, make sure that there are no boats, obstructions, or swimmers around you.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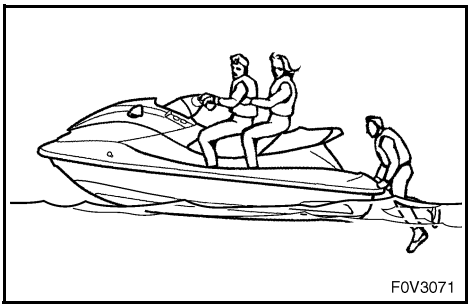
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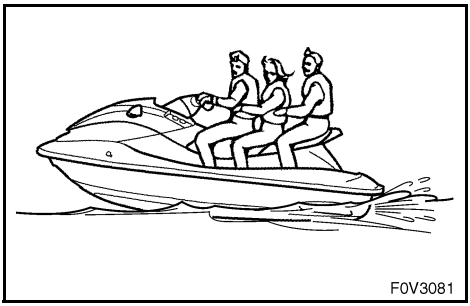
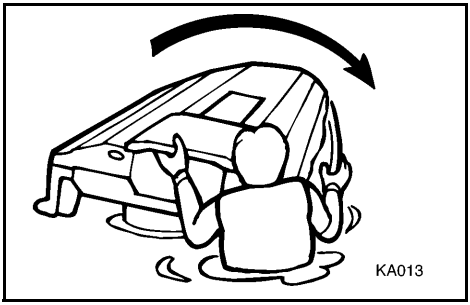
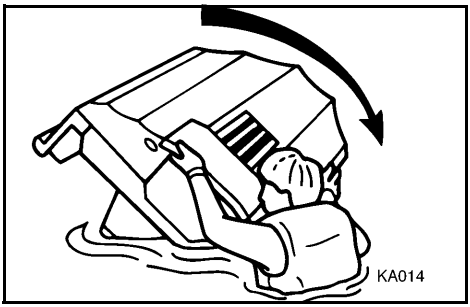

F0V3081

NOTE:

The heavier the total weight of the operator and passengers, the more difficult it will be to balance the watercraft. Do not operate the watercraft when the total weight exceeds 240 kg (530 lb) including any cargo. If it is difficult to balance the watercraft at a standstill, proceed as follows:

1. The passenger must steady the watercraft while the operator is boarding. The operator pulls him or herself up to a kneeling position on the platform, and then moves to the seat and sits astride to balance the watercraft.
2. The operator attaches the engine shut-off cord to his or her left wrist, and then installs the clip to the engine shut-off switch.
3. The operator starts the engine and lets it run at idle.
4. The passenger pulls him or herself up to a kneeling position, and then crawls onto the seat as the watercraft accelerates.
5. The operator gradually increases speed to balance the watercraft.





EJU18101

Capsized watercraft

If the watercraft capsizes, turn it over immediately.

Be sure to carefully follow the procedures below to prevent injury or damage to the watercraft.

⚠WARNING

IMPROPER UPRIGHTING CAN CAUSE INJURY:

- **Make sure that the engine shut-off cord is removed from the engine shut-off switch.**
- **Do not put your hands in the intake grate.**
- **Watch so you are not hit by the watercraft as it comes over.**

CAUTION:

If the watercraft capsizes, release the throttle lever immediately. Oil could flow into the air filter case and the engine could be damaged.

1. Remove the clip from the engine shut-off switch.
2. Swim to the rear of the watercraft. Pull the watercraft over with your left hand on the ride plate while pushing down on the gunwale with your right hand or foot.

NOTE:

If the port (left) side of the capsized watercraft is tilting up, push down on the gunwale so that the port (left) side is down before turning the watercraft clockwise.

CAUTION:

Do not turn the watercraft over counterclockwise, otherwise water can leak into the engine, which can result in severe damage.

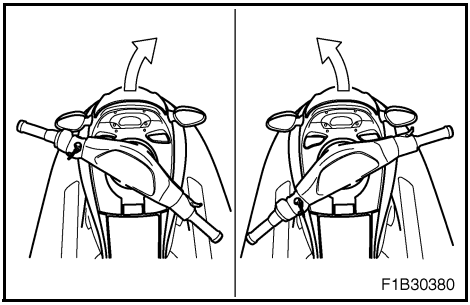
3. Start the engine and operate the watercraft to discharge any water remaining in the engine compartment. (If the engine does not start, see page 5-7, “Towing the watercraft” or page 5-8, “Submerged watercraft.”)

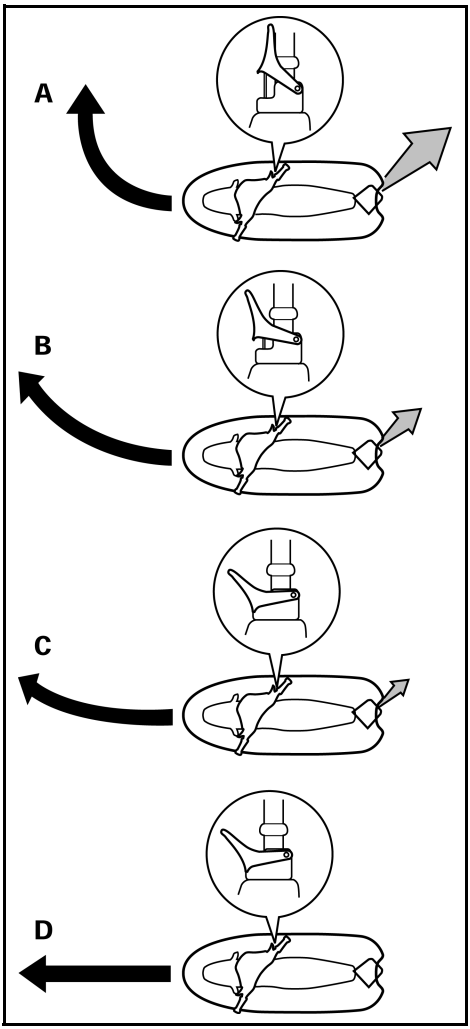
NOTE:

To efficiently discharge water from the engine compartment, operate the watercraft as straight as possible and above planing speed for at least 2 minutes.

CAUTION:

Do not operate the engine at full throttle for at least one minute after the engine has been restarted. Excessive water in the bilge can splash into the engine, which can result in severe damage.





EJU19960

Turning the watercraft

Steering control depends on the combination of handlebar position and the amount of throttle.

Water sucked in through the intake grate is pressurized by the impeller in the jet pump. As the pressurized water is expelled from the pump through the jet thrust nozzle, it creates thrust to move and steer the watercraft. The higher the engine speed, the more thrust produced.

The amount of jet thrust, in addition to the position of the handlebars, determines how sharply you turn.

A. More throttle produces higher thrust, so the watercraft will turn more sharply.
B. Less throttle produces lower thrust, so the watercraft will turn more gradually.
C. Releasing the throttle lever completely produces only minimum thrust. If you are traveling at speeds above trolling, you will have rapidly decreasing ability to steer without throttle. You may still have some turning ability immediately after releasing the throttle lever, but once the engine slows down, the watercraft will no longer respond to handlebar input until you apply throttle again or you reach trolling speed.

   At trolling speed, the watercraft can be turned gradually by handlebar position alone using just the amount of thrust available at idle.
D. If the engine is stopped while riding, there is no thrust. The watercraft will go straight even though the handlebars are turned.

You need throttle to steer.

⚠WARNING

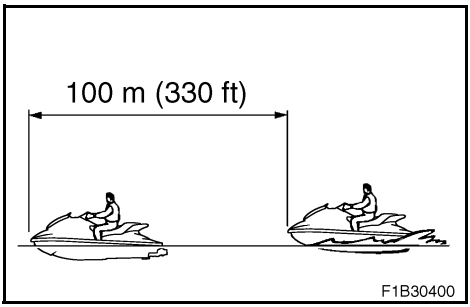
- **Do not release the throttle lever when trying to steer away from objects—you need throttle to steer. A collision could result in severe injury or death.**
- **When operating at higher speeds, make gradual turns or slow down before turning. Sharp high-speed turns may cause the watercraft to slide sideways or spin, throwing the operator and passengers overboard which could cause an injury.**

This model has the Yamaha Engine Management System (YEMS) that includes an Off-Throttle Steering (OTS) system. It will activate at planing speeds should you attempt to steer the watercraft after releasing the throttle lever (see condition C above). The OTS system assists in turning by continuing to supply some thrust while the watercraft is decelerating, but you can turn more sharply if you apply throttle while turning the handlebars. The OTS system does not function below planing speeds or when the engine is off. Once the engine slows down, the watercraft will no longer turn in response to handlebar input until you apply throttle again or you reach trolling speed.

EJU18500

Stopping the watercraft

The watercraft is not equipped with a separate braking system. It is stopped by water resistance when the throttle lever is released. From full speed, the watercraft comes to a complete stop in approximately 100 m (330 ft) after the throttle is released and the engine is stopped, although this distance will vary depending on many factors, including gross weight, water surface conditions, and wind direction. The watercraft slows down as soon as the throttle lever is released, but will coast for a distance before fully stopping. If you are not sure you can stop in time before hitting an obstacle, apply throttle and turn in another direction.



⚠WARNING

- **Allow adequate stopping distance.**
- **Take early action to avoid collisions. Remember, watercraft and other boats do not have brakes.**
- **Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft to give you time to stop.**
- **Do not shut the engine off when slowing down in case you need engine power to steer away from a boat or other obstacle that comes into your path.**
- **Do not use the reverse function to slow down or stop the watercraft as it could cause you to lose control, be ejected, or impact the handlebars.**

EJU10810

Beaching the watercraft

1. Make sure no obstructions, boats or swimmers are near the beach. Release the throttle lever about 100 m (330 ft) before you reach the intended beaching area.
2. Approach the beach slowly and stop the engine before reaching land.
   Remember: you need throttle to steer.
3. Get off the watercraft and pull it up on the beach.

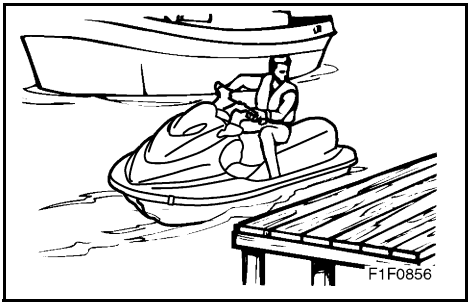
CAUTION:

Small pebbles, sand, seaweed, and other debris can be pulled into the jet intake and impair or damage the impeller. Always stop the engine and get off before beaching the watercraft.

EJU10820

Docking the watercraft

1. Make sure that no obstructions, boats or swimmers are close to the watercraft. Reduce speed about 100 m (330 ft) away from the dock.
2. Slowly approach the dock and stop the engine just before coming alongside it.



EJU12540

Reverse on waterways

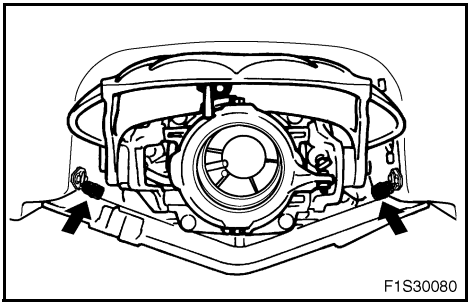
Reverse can be used for slow speed maneuvering when it is necessary to back up out of tight spots where you cannot turn around. Reverse can only be used to slow down or stop during low speed maneuvering, such as when docking.

Once the engine is idling, shift to reverse and gradually increase engine speed. Make sure that there are no obstacles or people behind you before shifting to reverse.

EJU12550

Rough water operation

The force of landing after jumping can cause a strong impact on both the watercraft and the operator and passengers. It is possible for the operator to hit his or her chest or jaw on the watercraft body or handlebars and be injured. Do not operate the watercraft with your chin right above the handlebars or with your feet outside the watercraft. Operating in rough water or jumping waves can also crack the watercraft body or damage internal parts. Avoid operating in rough water or bad weather conditions.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EJU18620

Post-operation checks

Always perform the following post-operation checks after operating the watercraft.

1. Remove the watercraft from the water.
2. Wash down the hull, handlebars, and jet unit with fresh water.
3. Remove the seat and check the engine compartment for water. To drain excess water, remove the stern drain plugs, and then raise the bow of the watercraft enough to allow water in the bilge to drain out.

NOTE:

This watercraft is equipped with a jet vacuum bilge draining system and an electric bilge draining system that remove water from the engine compartment while you are underway. However, some residual water will remain. (See “Bilge” on page 3-9 for more information.)

4. Put the watercraft in a horizontal position.
5. Flush the cooling system to prevent it from clogging with salt, sand, or dirt. (See page 4-1 for flushing procedures.)
6. Drain residual water from the exhaust system by alternately squeezing and releasing the throttle lever for 10 to 15 seconds while the engine is running.

CAUTION:

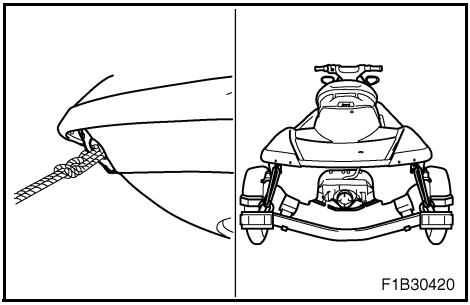
Do not run the engine for more than 15 seconds on land. The engine could overheat.

7. If the watercraft will be stored for a week or more, lubricate internal engine components to help prevent corrosion. (See page 4-3 for lubrication procedures.)
8. Rinse the engine and engine compartment with a small amount of water.

CAUTION:

Do not use high pressure when rinsing the engine or engine compartment as severe engine damage could result.

9. Wipe the engine and engine compartment dry with a clean cloth (repeat step 3, if necessary).
10. Wipe the hull, handlebars, and jet unit dry with a clean cloth.
11. Spray a rust inhibitor, such as Yamaha Silicone Protectant and Lubricant, on metallic parts to minimize corrosion.
12. Allow the engine compartment to air dry completely before installing the seat.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EJU18110

Transporting

When transporting the watercraft on a trailer, secure the tie downs to the trailer through the bow eye and stern eye.

CAUTION:

- **Do not route ropes or tie downs over the seat, as they may leave permanent marks on the seat's surface. Also, wrap the ropes or tie downs with towels or rags where they touch the body of the watercraft to avoid scratching or damage.**
- **Before putting the watercraft on the trailer or transporting it, be sure to put the shift lever in the forward position, otherwise the reverse gate may hit an obstruction, which may cause damage.**

EJU10860

MAINTENANCE AND CARE

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EJU18121

Storage

⚠WARNING

Always place the watercraft upright in a horizontal position when storing it, otherwise fuel could leak out into the engine or engine compartment, which could result in a fire hazard.

Storage for prolonged periods of time, such as winter storage, requires preventative maintenance to ensure against deterioration. It is advisable to have the watercraft serviced by a Yamaha dealer prior to storage. However, the following procedures can be performed by the owner.

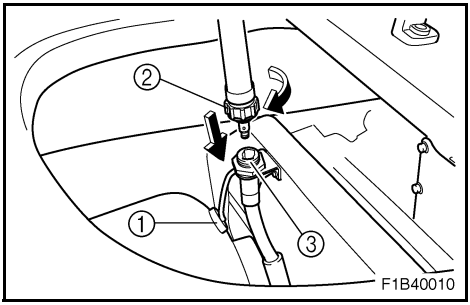
EJU18131

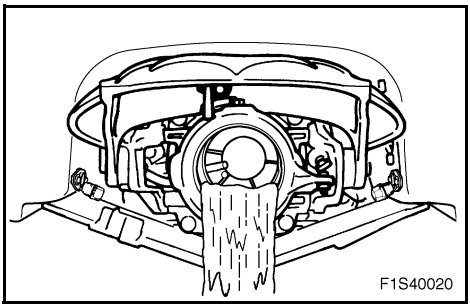
Flushing the cooling system

Flushing the cooling system is essential to prevent the cooling system from being clogged with salt, sand, or dirt.

CAUTION:

- **Do not supply water to the cooling water passages when the engine is not running. The water could flow back through the muffler into the crankcase causing severe engine damage.**
- **Do not run the engine of the watercraft for more than 15 seconds without supplying water, otherwise the engine may overheat.**





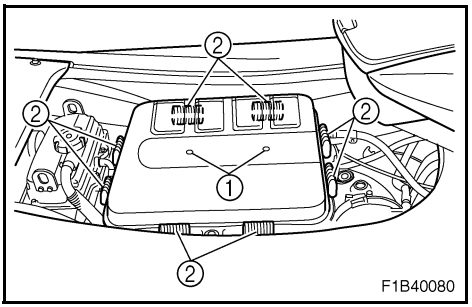
1. Put the watercraft on land in a horizontal position.
2. Remove the rear seat and seat storage compartment. (See page 2-5 for seat removal and installation procedures.)
3. Open the flushing hose connector cap ①, and then insert the garden hose adapter ② into the flushing hose connector ③ and turn it until it is securely connected.
4. Connect the garden hose adapter to a water tap using a hose.
5. Start the engine, and then immediately turn the water supply on until water flows out continually from the jet nozzle.
6. Run the engine at idling speed for about 3 minutes watching the engine condition. If the engine stops while flushing, turn the water supply off immediately and repeat the above steps.
7. Turn the water supply off, and then force the remaining water out from the cooling passages by alternately squeezing and releasing the throttle lever for 10 to 15 seconds.
8. Stop the engine.
9. Remove the garden hose adapter and secure the cap.

EJU19011

Lubrication

⚠WARNING

Do not spray flammable rust inhibitor products on engine surfaces while the engine is hot. The sprayed substance or propellants could catch fire.



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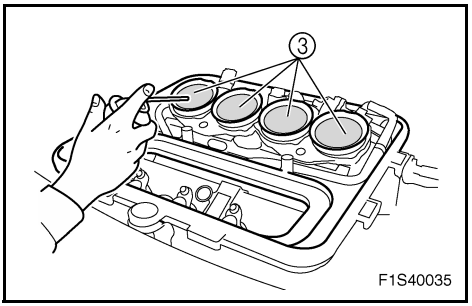


F1S40035

1. Remove the rear and front seats. (See pages 2-5 to 2-6 for seat removal and installation procedures.)
2. Remove the air filter case cover screws ①, slide the locks ② open, and then remove the case cover.
3. Remove the air filter case cover and air filter element.
4. Spray a rust inhibitor such as Yamaha Stor-Rite Engine Fogging Oil into each intake opening ③ for 3 seconds.
5. Install the air filter element and air filter case cover.
6. Start the engine in a well-ventilated area and let it run at idle for 15 seconds.

CAUTION:

Do not run the engine for more than 15 seconds. The engine could overheat.

7. Lubricate all cables such as the throttle and steering cables.

NOTE:

Use a Yamaha Power Cable Luber and Yamaha Lube-Zall to pressure lubricate the cables and purge out any moisture between the inner and outer cables.

8. Lubricate the areas of the watercraft specified under Lubrication points on page 4-17.

EJU19622

Fuel system

⚠WARNING

GASOLINE AND ITS VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE!

- **Do not smoke when refueling, and keep away from sparks, flames, or other sources of ignition.**
- **Stop engine before refueling.**
- **Refuel in a well-ventilated area with the watercraft in a horizontal position.**
- **Do not stand or sit on the watercraft while refueling in case of fire.**
- **Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always properly dispose of gasoline-soaked rags.**
- **Avoid overfilling the fuel tank. Stop filling when the fuel level reaches approximately 50 mm (2 in) from the top of the fuel tank. Fuel expands as it warms up and could overflow if the fuel tank has been overfilled. If temporarily leaving the watercraft with a full fuel tank, do not leave it in direct sunlight. Leave it in a well-ventilated area with the watercraft in a horizontal position.**
- **Tighten the filler cap securely after refueling.**
- **If you should swallow some gasoline, inhale a lot of gasoline vapor, or get gasoline in your eyes, get immediate medical attention.**
- **If any gasoline spills onto your skin, immediately wash with soap and water. Change clothing if gasoline spills on it.**

Top off the fuel tank with fresh gasoline and add one ounce of Yamaha Fuel Stabilizer and Conditioner to each gallon of fuel.

EJU19700

Battery

If the watercraft will not be used for more than a month, disconnect the negative (–) lead first, then the positive (+) lead and breather hose, and then remove the battery from the watercraft.

Clean the battery casing using fresh water.

If the battery terminals are dirty or corroded, clean them with a wire brush.

Fully charge the battery, and then store it in a cool, dark place.

Apply Yamaha marine grease or Yamaha grease A to the battery terminals.

Check the battery at least every 2 months and fully charge it if necessary.

⚠WARNING

Be sure to connect the breather hose to the battery. Fire or explosion could result if the breather hose is damaged, obstructed, or not connected properly.

CAUTION:

The battery may not be usable again if you store it for a long period without charging it. Charge the battery periodically.

NOTE:

The condition of the battery can be known by checking the specific gravity of the electrolyte. However, you can also know the condition of the battery by measuring the voltage at both battery terminals. Charge the battery if the voltage is less than 12 volts.

Specific gravity (for reference):
1.28 at 20 °C (68 °F)

It is recommended to have a Yamaha dealer check the specific gravity and to charge the battery. If you maintain the battery yourself, be sure to read and follow the instructions provided with the battery tester and charger you use.

EJU11690

Cleaning the watercraft

Clean the watercraft before storing it for a long period.

1. Wash down the hull, handlebars, and drive unit with fresh water.
2. Rinse the engine and bilge area with fresh water. Drain off all water and wipe up remaining moisture with clean, dry rags.
3. Spray the engine's exterior with Yamaha Silicone Protectant and Lubricant.
4. Wax the hull with a non-abrasive wax such as Yamaha Silicone Wax.
5. Wipe all vinyl and rubber components, such as the seat and engine compartment seals, with a vinyl protectant such as Yamaha Protectant.

EJU11700

Maintenance and adjustments

Periodic inspection, adjustment and lubrication will keep your watercraft in the safest and most efficient condition possible. Safety is an obligation of the watercraft owner. The most important points of watercraft inspection, adjustment and lubrication are explained on the following pages.

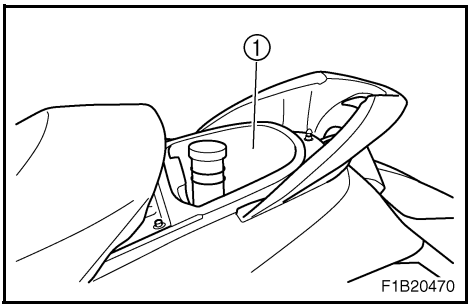
See your Yamaha dealer for genuine Yamaha replacement parts and optional accessories designed for your watercraft.

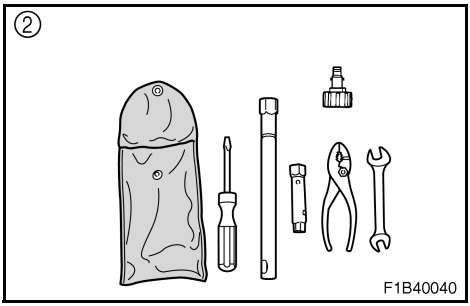
Remember that failures that are the result of the installation of parts or accessories which are not qualitatively equivalent to genuine Yamaha parts are not covered by the limited warranty.

⚠WARNING

- **Be sure to turn off the engine when you perform maintenance unless otherwise specified, otherwise an accident or injury could result from unexpected operation, moving parts, or electric shock. If the owner is not familiar with watercraft servicing, this work should be done by a Yamaha dealer. Improperly serviced components could fail or stop operating correctly, which could result in an accident.**
- **Modifications to this watercraft not approved by Yamaha may cause loss of performance or excessive noise, or render it unsafe for use. Consult a Yamaha dealer before attempting any changes.**

NOTE:
A service manual is available for purchase through a Yamaha dealer for owners who have the mechanical skills, tools, and other equipment necessary to perform maintenance not covered by this Owner's/Operator's Manual.





EJU18740

Owner's/Operator's Manual and tool kit

It is advisable always to carry the Owner's/Operator's Manual and tool kit ② with you whenever you use the watercraft. For your convenience, a storage compartment ① is provided on the watercraft for the manual and tool kit.

NOTE:
To protect these materials from water damage, it would be a good idea to put them in a waterproof bag. If your Owner's/Operator's Manual is damaged, order a replacement from a Yamaha dealer.

The service information included in this manual is intended to provide you with the necessary information for completing your own preventive maintenance and minor repairs. The tools provided in the tool kit are sufficient for this purpose.

EJU13550

Periodic maintenance chart

The following chart gives general guidelines for periodic maintenance. However, depending on your operating conditions maintenance may need to be performed more frequently.

(●) This mark indicates maintenance that you may do yourself.

(❍) This mark indicates work to be done by a Yamaha dealer.

ITEM / MAINTENANCE INTERVAL		INITIAL			THEREAFTER EVERY		PAGE
		10 hours	50 hours	100 hours	100 hours	200 hours	
			6 months	12 months	12 months	24 months	
Spark plug	Inspect, clean, adjust	●		●	●		4-15
Lubrication points	Lubricate			●	●		4-17
Intermediate housing	Lubricate	❍*1		●*2	●*2		4-19
Fuel system	Inspect			❍	❍		4-10
Fuel tank	Inspect, clean			❍	❍		4-10
Trolling speed	Inspect, adjust			❍	❍		4-22
Throttle shaft	Inspect			❍	❍		—
Cooling water passages	Flush	●*3					4-1
Water inlet strainer	Inspect, clean			❍	❍		—
Bilge strainer	Clean			❍	❍		—
Electric bilge pump strainer	Inspect, clean			❍	❍		—
Impeller	Inspect			❍	❍		—
Jet thrust nozzle angle	Inspect, adjust			●/❍	●/❍		4-14
Steering master	Inspect	❍		❍	❍		—
QSTS mechanism	Inspect, adjust	❍		❍	❍		—
Shift cable and mechanism	Inspect, adjust			❍	❍		4-14
Throttle cable	Inspect, adjust	❍		❍	❍		4-14
Stern drain plugs	Inspect, replace			❍	❍		3-10
Battery	Inspect			❍	❍		—
Rubber coupling	Inspect					❍	—
Engine mount	Inspect					❍	—
Nuts and bolts	Inspect	❍		❍	❍		—
Air filter	Inspect, replace			●	●		4-13
Engine oil	Replace	❍		❍	❍		4-11
Engine oil filter	Replace					❍	—
Valve clearance	Inspect, adjust					❍	—

*1: Grease quantity: 33.0–35.0 cm^3 (1.11–1.18 oz)
*2: Grease quantity: 6.0–8.0 cm^3 (0.20–0.27 oz)
*3: After every use

EJU18160

Inspecting the fuel system

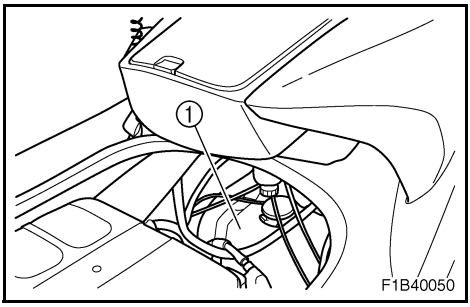
⚠WARNING

Gasoline is highly flammable and explosive. Failure to check for and repair any fuel leakage could result in fire or explosion. A fire or explosion can cause severe injury or death. Shut off the engine. Do not smoke. Avoid spilling gasoline.
Fuel in hose is pressurized.
Fuel can spray out and cause injury or a fire hazard if fuel line is disconnected.
Do not attempt to run engine with fuel line disconnected.

Check the fuel system for leaks, cracks, or malfunctions. If any problem is found, consult a Yamaha dealer.

Check:

- Fuel tank for water or dirt.
- Fuel tank cap (seal) for damage.
- Fuel tank for damage, cracks or leakage.
- Fuel hose joint for leakage.
- Fuel hose for cracks or other damage.
- Air bleeding passages for leakage.



EJU18410

Fuel tank

Check the fuel tank ① for leakage or water in the tank. If water is found in the fuel system or if the fuel tank needs to be cleaned, have a Yamaha dealer service the watercraft.

EJU18180

Changing the engine oil

⚠WARNING

Engine oil is extremely hot immediately after the engine is turned off. Coming into contact with or getting any engine oil on your clothes could result in burns.

CAUTION:

- **Do not run the engine with too much or not enough oil in the oil tank. Oil could spray out or the engine could be damaged.**
- **Be sure to change the engine oil after the first 10 hours of operation, and every 100 hours thereafter or at the start of a new season, otherwise the engine will wear quickly.**
  The oil filter should be replaced every two years or every 200 hours of operation. Have a Yamaha dealer replace the oil filter if necessary.

It is recommended to have a Yamaha dealer change the engine oil. However, if you choose to change the oil on your own refer to the service manual for this watercraft.

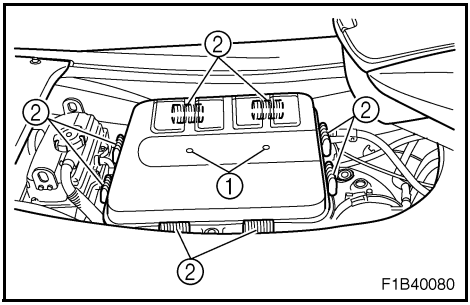
NOTE:

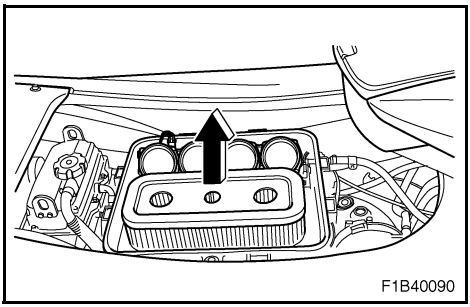
Dispose of used oil according to local regulations.

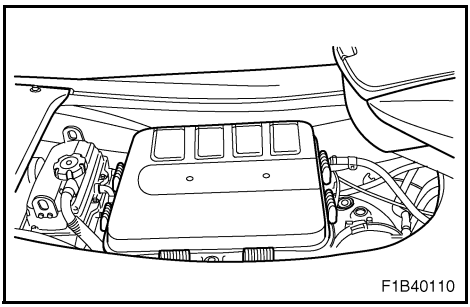
Recommended engine oil:
See page 4-25.
Oil quantity:
With oil filter replacement:
2.3 L (2.4 US qt, 2.0 Imp qt)
Without oil filter replacement:
2.1 L (2.2 US qt, 1.8 Imp qt)
Total amount:
4.5 L (4.8 US qt, 4.0 Imp qt)

CAUTION:

If oil is leaking or the oil pressure warning indicator comes on when the engine is running, immediately turn the engine off and have a Yamaha dealer check the watercraft. Continuing to operate the engine under such conditions could cause severe engine damage.







EJU18190

Checking the air filter element

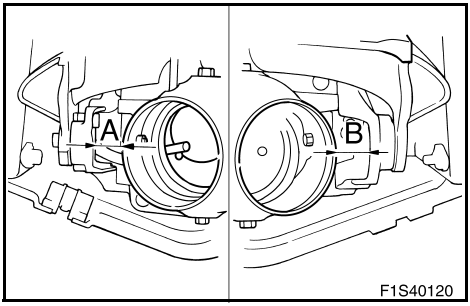
The air filter element should be checked every 12 months or every 100 hours of operation.

To check the air filter:

1. Remove the rear and front seats. (See pages 2-5 and 2-6 for seat removal and installation procedures.)
2. Remove the air filter case cover screws ①, slide the locks ② open, and then remove the case cover.
3. Remove the air filter element and check it for dirt and oil. Replace the air filter element if there is any oil buildup, or every 2 years or every 200 hours of operation.
4. Install the air filter element in the air filter case, and then install the case cover.

CAUTION:

- **Make sure that the air filter element is installed in the filter case properly.**
- **Do not start the engine with the air filter element removed, otherwise the pistons and cylinders could be damaged.**
- **If cleaning the air filter element, use cold or lukewarm water and let it air dry completely. Do not use detergent or solvent to clean the air filter element, or dry it with heat or compressed air, otherwise it could be damaged.**



EJU18970

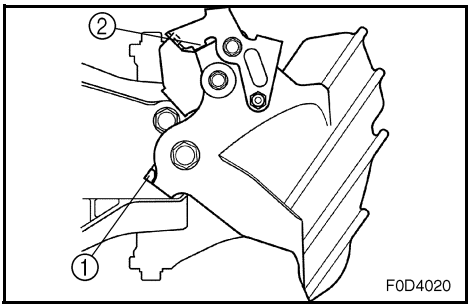
Inspecting the jet thrust nozzle angle

Check for smooth operation of the handlebars and jet thrust nozzle.

Turn the handlebars as far as possible to the right and left and check that the distance between the jet thrust nozzle and the bracket of the reverse gate are equal on right and left sides.

Distance A and B: A = B

If steering is stiff or misadjusted, have a Yamaha dealer service it.



EJU18520

Inspecting the shift cable

Place the shift lever in the reverse position.

Make sure that the reverse gate makes contact with the stopper ① on the bracket, and that the arm ② makes contact with the reverse gate.

If the reverse gate does not reach the correct positions, have a Yamaha dealer service it.

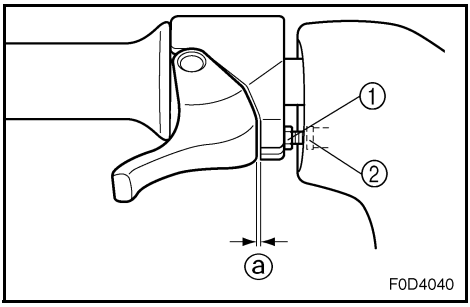
EJU11040

Inspecting and adjusting the throttle cable

Check that the throttle cable moves back to the set position smoothly and that free play is within specification.

1. Squeeze and release the throttle lever. If the lever does not return smoothly, have a Yamaha dealer service it.
2. Adjust free play ⓐ by loosening the locknut ① and turning the adjuster ②.

Throttle lever free play:
4–7 mm (0.16–0.28 in)



EJU21070

Cleaning and adjusting the spark plugs

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate something about the condition of the engine. For example, if one spark plug shows a distinctly different color, the engine could be defective. Do not attempt to diagnose any problems yourself. Have a Yamaha dealer service the watercraft.

Remove and inspect the spark plugs periodically; heat and deposits will cause the spark plugs to slowly break down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, replace the spark plug with the specified plug.

Removing a spark plug:

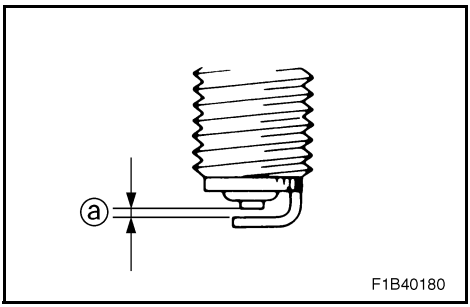
1. Remove the air filter case cover and air filter element. (See page 4-13 for air filter removal and installation procedures.)
2. Remove the spark plug cap.

CAUTION:

Do not use any tools to remove or install the spark plug cap, otherwise the ignition coil coupler may get damaged. The spark plug cap may be difficult to remove because the rubber seal on the end of the cap fits tightly. To remove the spark plug cap, simply twist it back and forth while pulling it up; to install it, twist it back and forth while pushing it down.

3. Remove the spark plug.

Specified spark plug: NGK CR9EB



Measure the spark plug gap ⓐ with a wire thickness gauge. Replace the spark plug or adjust the gap to specification if necessary.

Spark plug gap:
0.7–0.8 mm (0.028–0.031 in)

To install the spark plug:

1. Clean the gasket surface.
2. Wipe any dirt from the threads of the spark plug.
3. Install the spark plug, and then tighten it to the specified torque.

Spark plug tightening torque:
12.5 N·m (1.25 kgf·m, 9 ft·lb)

4. Install the spark plug cap.

NOTE:

- Wipe off any water on the spark plug or inside the cap before installing the spark plug cap. Push the spark plug cap down until it is securely installed.
- If a torque wrench is not available when you are installing a new spark plug, a good estimate of the correct torque is 1/4 turn to 1/2 turn past finger tight with the spark plug wrench included in the tool kit. Have the spark plug adjusted to the correct torque with a torque wrench as soon as possible.

⚠WARNING

Be careful not to damage the insulator when removing or installing a spark plug. A damaged insulator could allow sparks to escape, which could lead to an explosion or fire.

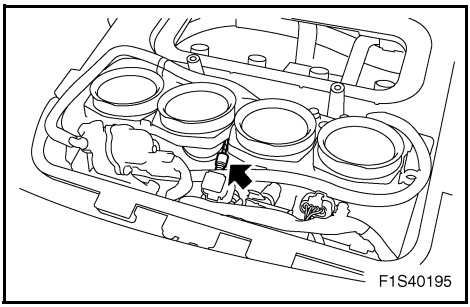
5. Install the air filter element in the air filter case, and then install the air filter case cover.

EJU18220

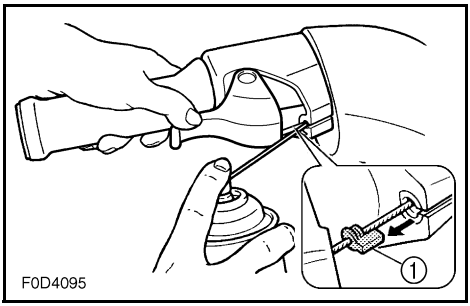
Lubrication points

To keep moving parts sliding or rotating smoothly, coat them with water-resistant grease.

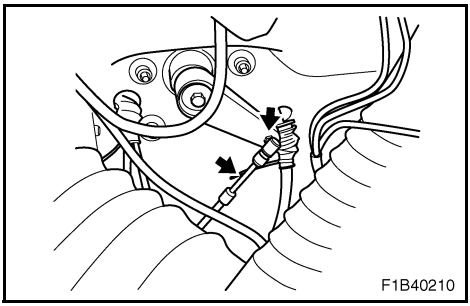
Recommended water-resistant grease:
Yamaha Marine Grease/
Yamaha Grease A



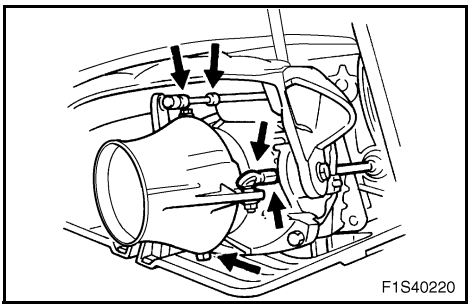
- Throttle cable (throttle body end)



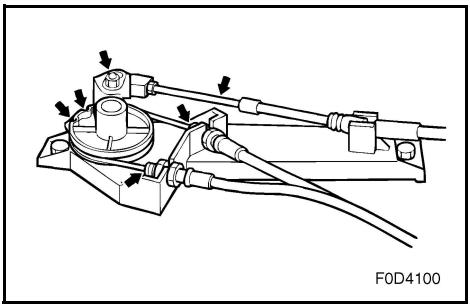
- Throttle cable (handlebar end)
  Pull the throttle lever and remove the seal ①. Spray a rust inhibitor into the outer cable. Refit the seal securely.



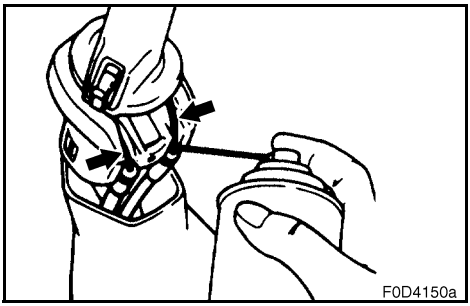
- Steering cable (handlebar end)



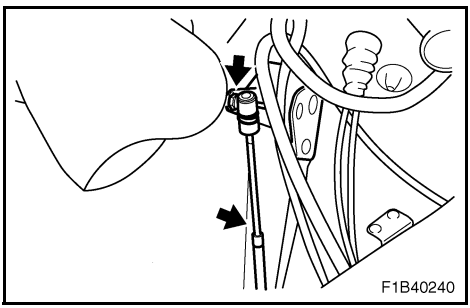
- Steering cable (nozzle end)
- Nozzle pivot shaft
- QSTS cable (nozzle end)



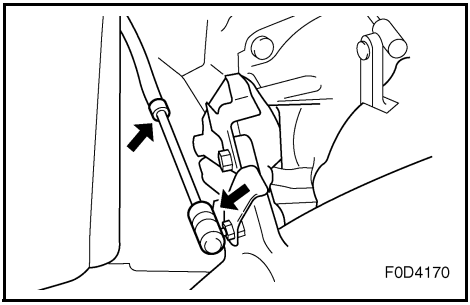
- QSTS cables (pulley end)



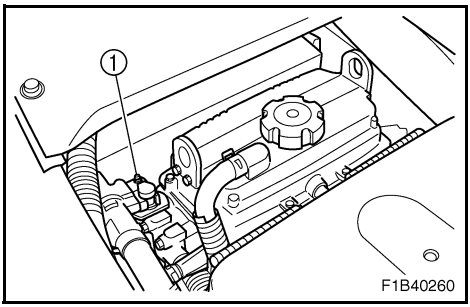
- QSTS cables (handlebar end)
  Remove the QSTS cable housing. Spray a rust inhibitor into the outer cable. Reinstall the QSTS cable housing.



- Shift cable (lever end)



- Shift cable (reverse gate end)



- Intermediate housing
  Using a grease gun, fill the intermediate housing with water-resistant grease through the grease nipple ①.

Grease quantity:
Initial 10 hours or 1 month:
33.0–35.0 cm^3 (1.11–1.18 oz)
Every 100 hours or 12 months:
6.0–8.0 cm^3 (0.20–0.27 oz)

EJU19710

Inspecting the battery

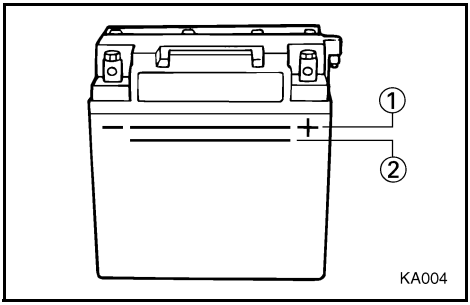
Check the level of the battery electrolyte and make sure that the negative and positive leads are securely tightened.

⚠WARNING

- **Battery electrolyte is poisonous and dangerous, causing severe burns, etc. Electrolyte contains sulfuric acid. Avoid contact with skin, eyes, or clothing.**
  Antidotes
  External: Flush with water.
  Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.
  Eyes: Flush with water for 15 minutes and get prompt medical attention.
  Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc., well away. If using or charging the battery in an enclosed space, make sure that it is well ventilated. Always shield your eyes when working near batteries.
  KEEP OUT OF THE REACH OF CHILDREN.
- **Be sure to connect the breather hose to the battery. Fire or explosion could result if the breather hose is damaged, obstructed, or not connected properly.**

CAUTION:

- **Be careful not to place the battery on its side.**
- **Be sure to remove the battery from the battery compartment when adding electrolyte or charging the battery.**



To replenish the battery:

1. Make sure that the electrolyte level is between the upper ① and lower ② level marks.
2. Refill the battery with distilled water if necessary.

CAUTION:

Normal tap water contains minerals that are harmful to a battery. Use only distilled water for replenishing the battery.

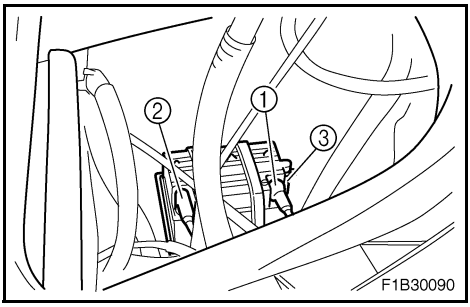
To recharge the battery:

CAUTION:

Do not attempt to charge a battery hastily. Battery life could be shortened.

It is recommended to have a Yamaha dealer charge the battery. If you charge the battery yourself, carefully read the battery charger instructions before charging and follow the points below.

1. Remove all caps from the battery cell.
2. Add distilled water to the specified level if the electrolyte level is low.
3. Set the charging rate to 1.9 ampere and charge the battery slowly until the explosive gases are discharged vigorously from the battery cells.



To connect the battery terminals:

1. Make sure that the connections are correct when you install the battery in the watercraft.
2. Make sure that the breather hose is properly connected and that it is not damaged or obstructed.
3. Make sure that the battery is securely held in place.

① Positive (+): Red lead
② Negative (–): Black lead
③ Breather hose

EJU18231

Adjusting the fuel injection system

The fuel injection system was set at the Yamaha factory. Have a Yamaha dealer service the watercraft if necessary.

CAUTION:

Do not attempt to adjust the fuel injection system. If the settings are changed poor engine performance and damage may result.

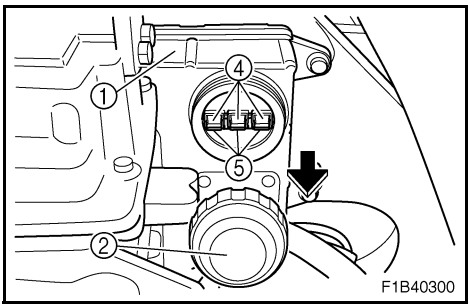
EJU18240

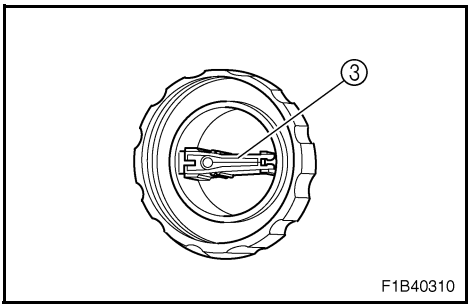
Checking the trolling speed

1. Put the watercraft in the water.
2. Start the engine and warm it up. Use the tachometer in the multifunction meter to check the trolling speed.

Trolling speed: 1,550–1,750 r/min

If the trolling speed is out of specification, have a Yamaha dealer make this adjustment.





EJU18250

Replacing the fuse

The fuse is in the electrical box ①.

To replace the fuse:

1. Remove the cap ②.
2. Replace the fuse ④ with the spare fuse ⑤ of the correct amperage by using the special tool ③ on the reverse side of the cap.

Fuse amperage:
20 A (main)
3 A (meter)
3 A (bilge pump)

⚠WARNING

Do not use fuses of higher amperage than those recommended. Substitution of a fuse of improper rating can cause extensive electrical system damage and possible fire.

EJU13590

Specifications

ITEM \ MODEL	Unit	FX High Output/FX Cruiser High Output
WATERCRAFT CAPACITY		
Maximum people on board	Number of people	3
Maximum load capacity	kg (lb)	240 (530)
DIMENSIONS		
Length	mm (in)	3,340 (131.5)
Width	mm (in)	1,230 (48.4)
Height	mm (in)	1,160 (45.7)/1,240 (48.8)
Dry weight	kg (lb)	363 (800)
PERFORMANCE		
Maximum output	kW (PS) @ r/min	117.7 (160.0)@ 10,000
Maximum fuel consumption	L/h (US gal/h, Imp gal/h)	45 (11.9, 9.9)
Cruising range at full throttle	hr.	1.56
Trolling speed	r/min	1,550–1,750
ENGINE		
Engine type		4-stroke
Number of cylinders		4
Engine displacement	cm^3 (cu in)	1052 (64.2)
Bore & stroke	mm (in)	76 × 58 (2.99 × 2.28)
Compression ratio		11.9:1
Lubrication system		Dry sump
Cooling system		Water cooled
Starting system		Electric starter
Ignition system		TCI
Spark plug		CR9EB (NGK)
Spark plug gap	mm (in)	0.7–0.8 (0.028–0.031)
Battery capacity	V-AH	12-19
Charging system		Flywheel magneto

ITEM \ MODEL	Unit	FX High Output/FX Cruiser High Output
DRIVE UNIT		
Propulsion system		Jet pump
Jet pump type		Axial flow, single stage
Impeller rotation		Counterclockwise (viewed from rear)
Jet thrust nozzle horizontal angle	Degree	24 + 24
Jet thrust nozzle trim angle	Degree	-10, -5, 0, 5, 10
FUEL AND OIL		
Recommended fuel		Regular unleaded gasoline
Minimum octane rating	PON	86
	RON	90
Recommended engine oil		SAE 10W-30 API SE, SF, SG, SH, SJ, SL
Fuel tank capacity		
Total	L (US gal, Imp gal)	70 (18.5, 15.4)
Engine oil quantity		
With oil filter replacement	L (US qt, Imp qt)	2.3 (2.4, 2.0)
Without oil filter replacement	L (US qt, Imp qt)	2.1 (2.2, 1.8)
Total amount	L (US qt, Imp qt)	4.5 (4.8, 4.0)

E

EJU11150

TROUBLESHOOTING AND EMERGENCY PROCEDURES

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Troubleshooting chart 5-1
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5

EJU11160

Troubleshooting

If you have any trouble with your watercraft, use this section to check for the possible cause.

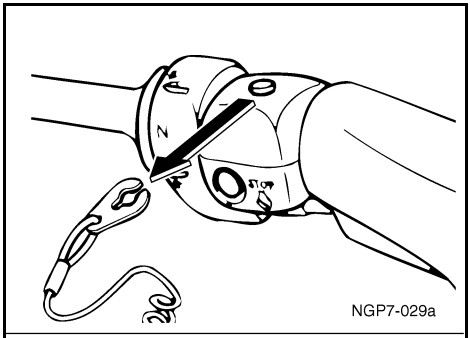
If you cannot find the cause, or if the procedure for replacement or repair is not described in this Owner's/Operator's Manual, have a Yamaha dealer perform the necessary service.

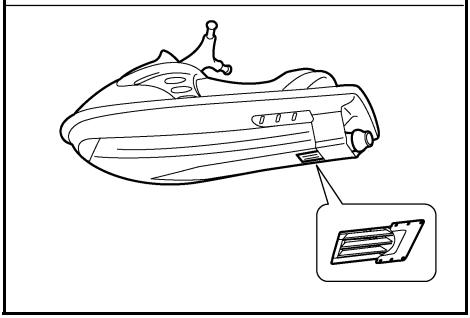
EJU13670

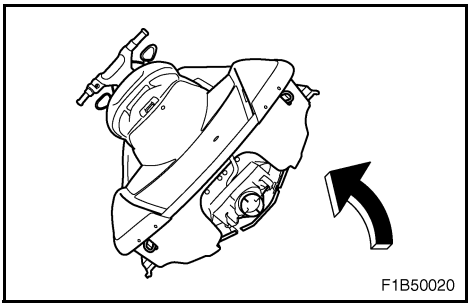
Troubleshooting chart

TROUBLE	POSSIBLE CAUSE		REMEDY	PAGE
Engine does not start	**Starter motor does not turn over**			
	Yamaha Security System	Lock mode selected	Select unlock mode	2-18
	Engine shut-off switch	Clip not in place	Install clip	2-10
	Fuse	Burned out	Replace the fuse and check wiring	4-23
	Battery	Run down	Recharge	4-20
		Poor terminal connections	Tighten as required	4-20
		Terminal corroded	Clean	4-5
	Starter motor	Faulty	Have serviced by Yamaha dealer	—
	Starter motor turns over			
	Throttle lever	Squeezed	Release	2-11
	Fuel	Empty	Refill as soon as possible	3-3
		Stale or contaminated	Have serviced by Yamaha dealer	4-10
	Fuel tank	Water or dirt present	Have serviced by Yamaha dealer	4-10
	Spark plug	Fouled or defective	Clean or replace	4-15
	Spark plug cap	Not connected or loose	Connect properly	4-15
		Connected to wrong cylinder	Connect properly	4-15
	Fuel injection system	Fuel pump faulty	Have serviced by Yamaha dealer	—

TROUBLE	POSSIBLE CAUSE		REMEDY	PAGE
Engine runs irregularly or stalls	Fuel	Empty	Refill as soon as possible	3-3
		Stale or contaminated	Have serviced by Yamaha dealer	4-10
	Fuel tank	Water or dirt present	Have serviced by Yamaha dealer	4-10
	Spark plug	Fouled or defective	Replace	4-15
		Incorrect heat range	Replace	4-15
		Gap incorrect	Adjust	4-15
	Spark plug cap	Loose	Connect properly	4-15
		Cracked, torn, or damaged	Replace	—
	Electrical wiring	Loose connection	Tighten or connect properly	—
	Fuel injection system	Jet nozzle clogged	Have serviced by Yamaha dealer	—
Warning light or indicator blinks	Fuel level	Empty	Refill as soon as possible	3-3
	Engine overheated	Jet intake clogged	Clean	5-3
	Check engine warning	Faulty sensors	Have serviced by Yamaha dealer	—
Watercraft slow or loses power	Yamaha Security System	Low-RPM mode selected	Select normal mode	2-18
	Cavitation	Jet intake clogged	Clean	5-3
		Engine speed reduction control activated	Clean jet intake and cool engine	2-25
	Oil pressure warning	Engine speed reduction control activated	Add oil	2-24
	Spark plug	Fouled or defective	Replace	4-15
		Incorrect heat range	Replace	4-15
		Gap incorrect	Adjust	4-15
	Spark plug caps	Loose	Connect properly	4-15
	Electrical wiring	Loose connection	Tighten or connect properly	—
	Fuel	Stale or contaminated	Have serviced by Yamaha dealer	4-10
	Air filter	Clogged	Clean or replace	4-13
		Oil buildup	Replace	4-13







EJU11180

Emergency procedures

EJU11190

Cleaning the jet intake and impeller

If weeds or debris get caught in the intake or impeller, cavitation can occur, causing jet thrust to decrease even though engine speed rises. If this condition is allowed to continue, the engine will overheat and may seize. If there is any sign that the jet intake or impeller is clogged with weeds or debris, beach the watercraft and check the intake and impeller. Always stop the engine before beaching the watercraft.

⚠WARNING

Before attempting to remove weeds or debris from the jet intake or impeller areas, shut the engine off and remove the clip from the engine shut-off switch. Severe injury or death could result from contact with the rotating parts of the jet pump.

1. Turn the watercraft on its side as shown.

CAUTION:

- **Place a suitable clean cloth or carpeting underneath the watercraft to protect it from abrasions and scratches.**
- **Always turn the watercraft over onto its port (left) side.**
- **When turning the watercraft on its side, support the bow so the handlebars cannot be bent or damaged.**

2. Remove any weeds or debris from around the drive shaft, impeller, pump housing, and jet thrust nozzle.

If debris is difficult to remove, consult your Yamaha dealer.

CAUTION:

Always avoid operating your watercraft in areas where weed growth is thick. If traveling in weeded areas is unavoidable, operate the engine alternately at partial throttle and full throttle. Weeds tend to accumulate more at a steady speed and at trolling speed. If weeds clog the intake or impeller area and cause cavitation, follow the cleaning procedure above.

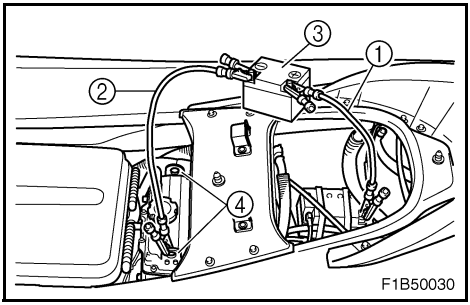
EJU18440

Jumping the battery

If the watercraft battery has run down, the engine can be started using a 12-volt battery and jumper cables.

⚠WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. Electrolyte contains sulfuric acid. Avoid contact with skin, eyes or clothing.
Antidotes
External: Flush with water.
Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately.
Eyes: Flush with water for 15 minutes and get prompt medical attention.
Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. well away. If using or charging the battery in an enclosed space, make sure that it is well ventilated. Always shield your eyes when working near batteries.
KEEP OUT OF THE REACH OF CHILDREN.



EJU18450

Connecting the jumper cables

1. Connect the positive (+) jumper cable ① to the positive (+) terminals of both batteries.
2. Connect one end of the negative (–) jumper cable ② to the negative (–) terminal of the booster battery ③.
3. Connect the other end of the negative (–) cable to an engine hanger ④.

CAUTION:

Do not connect the end of the jumper cable to the negative (–) terminal on the watercraft battery! Be sure all connections are secure and correct before attempting to start the engine. Any wrong connection may damage the electrical system.

4. Start the engine, and then disconnect the cables by reversing the steps above.

CAUTION:

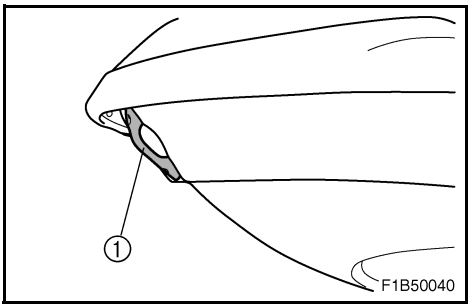
- **Never push the start switch while the engine is running.**
- **Do not operate the start switch for more than 5 seconds, otherwise the battery will be discharged and the engine will not start. Also, the starter motor may be damaged. If the engine does not start in 5 seconds, release the start switch, wait 15 seconds, and then try again.**

EJU19130

Towing the watercraft

If the watercraft becomes inoperative in the water, it can be towed to shore.

If the watercraft must be towed in an emergency using a towline, the operator should ride the watercraft, holding onto the handlebars.



CAUTION:

- **Tow the watercraft at 5 mph (8 km/h) or less, otherwise water could enter the engine through the exhaust passages or through the air intake and flood the engine compartment if it is towed too fast.**
- **Tow the watercraft using the bow eye ① only.**
- **The bow must be kept up out of the water during towing to prevent water from entering the engine compartment.**

⚠WARNING

- **The watercraft should only be towed in an emergency.**
- **The towline should be long enough so that the watercraft will not collide with the towing boat when slowing down. A good rule of thumb is a towline that is three times the combined length of the towing boat and the watercraft.**
- **The operator of the towing boat must keep speed to a minimum and avoid traffic or obstacles which could be a hazard to the rider on the watercraft.**

EJU19020

Submerged watercraft

If the watercraft is submerged or flooded with water, follow the procedure below and consult a Yamaha dealer as soon as possible. Failure to do so may result in serious engine damage!

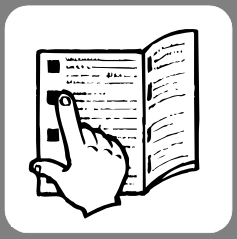
In an emergency:

1. Beach the watercraft and remove the stern drain plugs to drain the water from the engine compartment. (See page 3-9 for further instructions.)
   Remove the storage compartment plugs to drain the water from each storage compartment.
2. Install the stern drain plugs.
3. Have the watercraft inspected by a Yamaha dealer as soon as possible.

E

EJU11240

APPENDIX



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EJU11720

Limited warranty

YAMAHA MOTOR CORPORATION, U.S.A.
WATERCRAFT LIMITED WARRANTY

Yamaha Motor Corporation is proud of its heritage and reputation for producing products with high standards of quality and workmanship. Product excellence provides the cornerstone for our commitment to customer satisfaction. The Yamaha Watercraft Limited Warranty is your assurance of this commitment.

This warranty provides you with protection against the expense of repairs for your watercraft that are required as a result of defects in materials or workmanship. When maintained and utilized in the prescribed manner, you can count on your Yamaha watercraft to provide reliable service.

This warranty provides you with specific coverage and notes your responsibilities in maintaining and operating your watercraft. Please take the time to read and become familiar with this warranty.

PERIOD OF WARRANTY. Any new Yamaha watercraft purchased for pleasure use from an authorized Yamaha dealer in the United States, will be warranted against defects in material or workmanship for a period of one (1) year from date of purchase, subject to exclusions noted herein. Any Yamaha Watercraft purchased and utilized for commercial applications will be warranted for a period of ninety [90] days from the date of purchase, subject to exclusions noted herein. Replacement parts used in warranty repairs will be warranted for the balance of the applicable warranty period.

The warranty described here applies to watercrafts purchased and registered for use in the United States only. For warranty provisions outside the United States, contact the particular country's local Yamaha distributor.

OBTAINING REPAIRS UNDER WARRANTY. During the period of warranty, any authorized Yamaha dealer will, free of charge, repair or replace, at Yamaha's option, any parts adjudged defective by Yamaha due to faulty workmanship or material from the factory. All parts replaced under warranty will become the property of Yamaha Motor Corporation, U.S.A.

CUSTOMER'S RESPONSIBILITY. Under the terms of this warranty, the customer will be responsible for ensuring that the watercraft is properly operated, maintained, and stored as specified in the applicable Owner's/Operator's Manual.

The owner of the watercraft shall give notice to an authorized Yamaha dealer of any and all apparent defects within ten [10] days of discovery and make the watercraft available at that time for inspection and repairs at the dealer's place of business.

GENERAL EXCLUSIONS FROM WARRANTY. This warranty will not cover the repair of damage if the damage is a result of abuse or neglect of the product. Examples of abuse and neglect include, but are not limited to:
1. Racing or competition use, modification of original parts abnormal strain.
2. Lack of proper maintenance and off season storage as described in the Owner's/Operator's Manual, installation of parts or accessories that are not equivalent in design and quality to genuine Yamaha parts.
3. Use of lubricants, oils, and fuel/oil mixtures that are not suitable for watercraft motor use.
4. Damage as a result of accidents, collisions, contact with foreign materials, or submersion.
5. Growth of marine organisms on motor or hull surfaces.
6. Normal deterioration.
7. Gel coat stress cracks.

SPECIFIC PARTS EXCLUDED FROM WARRANTY.
Parts replaced due to normal wear or routine maintenance such as oil, spark plugs, fuel filters, impeller and liner, and anodes are not covered by warranty. Charges for transporting the watercraft to and from an authorized Yamaha dealer are excluded from warranty coverage.

TRANSFER OF WARRANTY. Transfer of the warranty from the original purchaser to any subsequent purchaser is possible by having the watercraft inspected by an authorized Yamaha dealer and requesting the dealer to submit a change of registration to Yamaha Motor Corporation. U.S.A. within ten [10] days of the transfer.

YAMAHA MOTOR CORPORATION, U.S.A. MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS AND TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY YAMAHA MOTOR CORPORATION, U.S.A. AND EXCLUDED FROM THIS WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. ALSO EXCLUDED FROM THIS WARRANTY ARE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

YAMAHA MOTOR CORPORATION, U.S.A.
Post Office Box 6555
Cypress, California 90630

WARRANTY QUESTIONS AND ANSWERS

Q. What costs are my responsibility during the warranty period?
A. The customer's responsibility includes all costs of normal maintenance services, non-warranty repairs, accident and collision damages.

Q. What are some examples of "abnormal" strain, neglect, or abuse?
A. These terms are general and overlap each other in areas. Specific examples include:
Running the watercraft out of oil, operating the machine with a broken or damaged part which causes another part to fail, and so on. If you have any specific questions on operation or maintenance, please contact your Yamaha dealer for advice.

Q. Does the warranty cover incidental costs such as transportation due to a failure?
A. No. The warranty is limited to repair of the watercraft itself.

Q. May I perform any or all of the recommended maintenance shown in the Owner's/Operator's Manual instead of having the dealer do them?
A. Yes, if you are a qualified mechanic and follow the procedures specified in the Owner's/Operator's and Service Manual. We do recommend, however, that items requiring special or equipment be done by a Yamaha dealer.

Q. Will the warranty be void or cancelled if I do not operate or maintain my new watercraft exactly as specified in the Owner's/Operator's Manual?
A. No. The warranty on a new watercraft cannot be "voided" or "cancelled". ***However, if a particular failure is caused by operation or maintenance other than as shown in the Owner's/Operator's Manual, that failure may not be covered under warranty.***

Q. What responsibility does my dealer have under this warranty?
A. Each Yamaha dealer is expected to:
1. Completely set up each new watercraft before sale.
2. Explain the operation, maintenance, and warranty requirements to your satisfaction at the time of sale, and upon your request at any later date. In addition, each Yamaha dealer is held responsible for his setup, service and warranty repair work.

Q. Is the warranty transferable to second owners?
A. Yes. The remainder of the existing warranty can be transferred upon request. The unit has to be inspected and re-registered by an authorized Yamaha dealer for the policy to remain effective.

CUSTOMER SERVICE

If your watercraft requires warranty service, you must take it to any authorized Yamaha dealer within the continental United States. Be sure to bring your warranty registration card or other valid proof of the original date of purchase. If a question or problem arises regarding warranty, first contact the owner of the dealership. Since all warranty matters are handled at the dealer level, this person is in the best position to help you. If you are still not satisfied and require additional assistance, please write:

YAMAHA MOTOR CORPORATION U.S.A.
CUSTOMER RELATIONS DEPARTMENT
P.O. Box 6555
Cypress, California 90630

CHANGE OF ADDRESS

The federal government requires each manufacturer to maintain a complete, up-to-date list of all first purchasers against the possibility of a safety-related defect and recall. This list is complied from the purchase registrations sent to Yamaha Motor Corporation, U.S.A. by the selling dealer at the time of your purchase.
If you should move after you have purchased your new watercraft, please advise us of your new address by sending a postcard listing your Yamaha model name, engine number, dealer number [or dealer's name] as it is shown on your warranty card, your name and new mailing address.
Mail to:

YAMAHA MOTOR CORPORATION, U.S.A.
P.O. Box 6555
Cypress, California 90630
Attention: Warranty Department

This will ensure that Yamaha Motor Corporation, U.S.A. has an up-to-date registration record in accordance with federal law.

EJU19862

YAMAHA EXTENDED SERVICE (Y.E.S.)

Keep your Yamaha protected even after your warranty expires with genuine Yamaha Extended Service (Y.E.S.).

- Y.E.S. is designed and administered by Yamaha Motor Corporation to provide maximum owner satisfaction. You get uninterrupted factory-backed coverage for extra peace of mind.
- Y.E.S. is flexible. You choose the plan that is right for you: 12 months, 24 months, 36 months, or (on four-stroke models) 48 months beyond your warranty period.
- Y.E.S. is designed and administered by the same Yamaha people who handle your warranty — and it shows in the comprehensive coverage benefits. There are no mileage limitations. Coverage is not limited to “moving parts” or the “drive train” like many other plans. And Y.E.S. covers manufacturing defects just like the warranty. See the sample contract at your Yamaha dealer to see how comforting uninterrupted factory-backed protection can be.
- You do not have to pay anything for covered repairs. There is no deductible to pay, and repairs are not “pro-rated.” You do not have any “out-of-pocket” expenses for covered repairs.
- In addition, Travel and Recreation Interruption Protection (TRIP) is included at no extra cost. TRIP gives you up to $150 reimbursement per occurrence for any reasonable expenses you incur because your Yamaha needs covered service: replacement vehicle rental, emergency towing, phone calls, even food and lodging when you are away from home. This superb coverage goes into effect when you purchase Y.E.S., so it applies to any warranty repairs as well as covered repairs during your entire Y.E.S. plan period.
- Y.E.S. coverage is honored at any authorized Yamaha dealer nationwide.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make your Yamaha much more valuable!

This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.
We urge you to act now. You will get the excellent benefits of TRIP coverage right away, and you will rest easy knowing you will have strong factory-backed protection even after your Yamaha Limited Warranty expires.

A special note:
If visiting your dealer is not convenient, contact Yamaha with your Primary ID number (your Owner’s Manual shows you where to find this number). We will be happy to help you get the Y.E.S. coverage you need.

Yamaha Service Marketing
P.O. Box 6555
Cypress, CA 90630
1-(866)-YES-EXTD
(1-866-937-3983)

Y E S

YAMAHA EXTENDED SERVICE

EJU11250

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